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The Effects of Participation in Community Service through Intercollegiate Athletics on
Servant Leadership Behaviors

by

Damien Westfield

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
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Under the Supervision of Professor Leverne Barrett

Lincoln, Nebraska

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The Effects of Participation in Community Service through Intercollegiate Athletics on
Servant Leadership Behaviors

Damien Westfield, Doctor of Philosophy

University of Nebraska, 2010

Advisor: Leverne Barrett

Abstract

This study examined the relationship between intercollegiate athletes who participate in community service and servant leadership. Data were collected from 136 student-athletes from two large Midwestern universities. These athletes were members of men's and women's soccer, women's rifle, men's and women's gymnastics, men's and women's cross country, volleyball and women's basketball. A MANCOVA statistical test was used to test the null hypotheses. Overall, the results yielded no statistically significant relationships between intercollegiate athletes who participated in community service and servant leadership when comparing the two universities. However, univariate between-subjects analyses yielded a statistically significant finding on subscale altruistic calling at University B. Results also indicated statistically significant relationships between participation in intercollegiate athletics with the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship when student-athletes were compared against each other at both universities. Additionally, the overall results showed gender to be a statistically significant moderator between intercollegiate athletics who participated in community service and servant leadership when comparing the two universities. Univariate between-subjects analyses by gender yielded a statistically significant finding on subscales altruistic calling and emotional healing at University A. Finally, univariate between-subjects analyses yielded statistically significant relationships between gender participation in intercollegiate athletics who participated in community service and the servant leadership subscales altruistic calling and emotional healing when student-athletes were compared against each other at both universities. Women at University B scored higher on altruistic calling and emotional healing.

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The Effects of Participation in Intercollegiate Athletics on Servant Leadership Behaviors

Chapter 1

Introduction

Context of the Problem

Ever since Greenleaf's (1970) essay on the servant as leader was published in 1977, servant leadership has drawn the attention of researchers. Leadership scholars and practitioners have studied servant leadership and its application in organizational contexts (Graham, 1991; Sendjaya & Sarros, 2002; Barbuto & Wheeler, 2006; Sendjaya, Sarros & Santora, 2008). This interest in servant leadership stems from the ever-changing organizational workforce and the need to find a leadership paradigm that will work effectively given the context of organizational life. Servant leaders attempt to simultaneously enhance the personal and professional growth of workers by improving the quality and caring of institutions through a combination of teamwork, community building, personal involvement in decision making and ethical and caring behavior (Spears, 1995).

To examine this approach and to add new insights regarding its applicability to other settings, this study focused solely on student-athletes. Studies have documented some of the many positive leadership developments of student-athletes. These include perseverance, growth, leadership skills, motivation, a willingness to serve their communities, self-reliance and the respect for diversity (Ryan, 1989; Richards and Aries, 1995; Potuto and Hanlon, 2006; White, Duda and Keller, 1998). Student-athletes must balance both the rigors of academics as well as the physical demands required to compete successfully at the college level. The student-athlete brings to his or her institution

personal values, beliefs, talents and leadership skills. However, the question whether student-athletes develop good leadership skills throughout their college years is still debatable. Research over the years has provided mixed findings pertaining to this question which makes this study valuable to the leadership field (Blann, 1985; Gayles and Hu, 2009; Stone and Strange, 1989; Suart, 1985.)

Statement of the Problem

The types of leadership behaviors student-athletes actually develop during their college experience, if any, is debatable. Therefore, this study examined whether there is a relationship between individuals who participate in intercollegiate athletics with the subscales of servant leadership. The servant leadership behaviors were self-reported by each student. The following questions guided this study:

1. Do the antecedents of servant leadership behaviors relate to student-athletes participation in their sports?
2. Does class standing and gender affect the antecedents of servant leadership behavior?

Historical Viewpoints on Leadership

Leadership in general has been studied for many decades and it is important to recognize the historical scholarly viewpoints when attempting to conduct research in this field. Because this study examined a relatively new leadership approach, servant leadership, it is vital to understand what the historical scholars have written on leadership and leader- follower leadership development. Bernard Bass's definition of leadership stated that leaders' action and effort must be to benefit followers without causing harm to them (Bass, 1985; Wren, 1995). The effectiveness of a leader is based

on his or her ability to influence followers to take actions that are centered on fairness and justice for all people (Bass, 1985; Wren, 1995). Leo Tolstoy defined leadership as an ever evolving process for leaders. Thus, leadership effectiveness will be determined by the situation in that, based on the leader's action and end result, one can determine whether or not a leader's action was positive or negative.

Plato delineated leadership as an individual's ability to rule followers and in the end evolve into a philosopher (Wren 1995). According to Plato, effective leaders will incorporate philosophy and political uniqueness within his or her leadership to effectively motivate followers to achieve a mission. Aristotle on the other hand, defined leadership as first selecting an individual with the best qualification, someone with the characteristics of honor and justice who has served as a follower, before evolving as a leader. An effective leader will be someone who is not born with specific leadership traits; or someone who inherits a leadership position as a result of family status, but more so, someone with good integrity who focuses on leading others based on the principles of nobility and pride (Wren, 1995).

Moreover, Niccolo Machiavelli stated that leadership is the unique ability of having two ways of leading others depending on the situation. That is, leading by laws or by force (Wren, 1995). Machiavelli in Wren (1995) noted that effective leaders must foster justice, peace, good faith, mercy, and integrity to followers but not necessarily demonstrate these qualities in their behaviors. Lao Tzu in Wren (1995) characterized leadership as an individual who leads others based on the principle of selflessness and morality. The effective leaders will lead others to achieve goals and tasks with minimum presence so that at the end, followers can truly believe that they completed the mission

by themselves. Mohandas Gandhi in Wren (1995) stated that leadership is the ability of an individual to motivate followers to pursue a just and non-violent mission. The effective leaders must demonstrate self-discipline, self-control, self-purification and recognize social status when taking actions that affect all people. Conversely, Du Bois in Wren (1995) stated leadership as the top 10% of individuals in society, who are provided with the right tools and trained to become effective leaders, should help uplift others. That is, not everyone can be a leader, thus it is important to find the top 10% of capable individuals in society and train them to become effective leaders.

Mary Parker Follet (1926) defined leadership as the aptitude of someone to maintain order and control of a situation. The effective leaders must be capable of organizing the experience of the group, making a goal achievable, as well as getting the full authority of the group. Situations are always evolving and leaders need to motivate followers to take actions that are needed for each situation (Follet, 1926). Conversely, Edwin Locke (1982) described leadership as the individual with the best attributes for the position who is capable of influencing followers to achieve an objective. A leader's effectiveness will be based on his or her ability to maximize production for management and at the same time, ensure that employees have shorter working hours and frequent breaks to complete tasks.

Douglas McGregor (1957) defined leadership from two perspectives. First, theory X states that employees are unintelligent and lazy. They dislike work, avoiding it whenever possible. In addition, employees should be closely controlled because they have little desire for responsibility, have little aptitude for creativity in solving organizational problems, and they will resist change. In contrast, Theory Y states that employees are

creative and competent; they want meaningful work; they want to contribute; and they want to participate in decision making and leadership functions. The effective leaders will motivate employees to be innovative with regards to their jobs; employees are active participants in decisions that affect the organization and employees; and given the responsibility by management to perform tasks that will develop employees personally and professionally.

The above review of the historical viewpoints on leadership and followers expected development was used to set the foundation for the importance of this study. Leadership and leadership development definitions vary from scholar to scholar and is evolving over time. The question of what makes followers develop antecedent leadership behaviors is still arguable. This study attempted to answer the latter question, focusing on student-athletes and their development of antecedent servant leadership behaviors as a result of their participation in community service programs within their respective institutions. In the proceeding section, the researcher examined domains of leadership paying explicit attention to what others have found regarding leadership and leader-follower leadership development.

Domains of Leadership

Sitkin, Lind, and Siang (2006, p. 28) identified six domains of leadership which are centered on creating organizations, changing organizations, and sustaining organizations as they confront internal and external obstacles: (a) personal leadership, (b) relationship leadership, (c) contextual leadership, (d) inspirational leadership, (e) supportive leadership, and (f) ethical leadership.

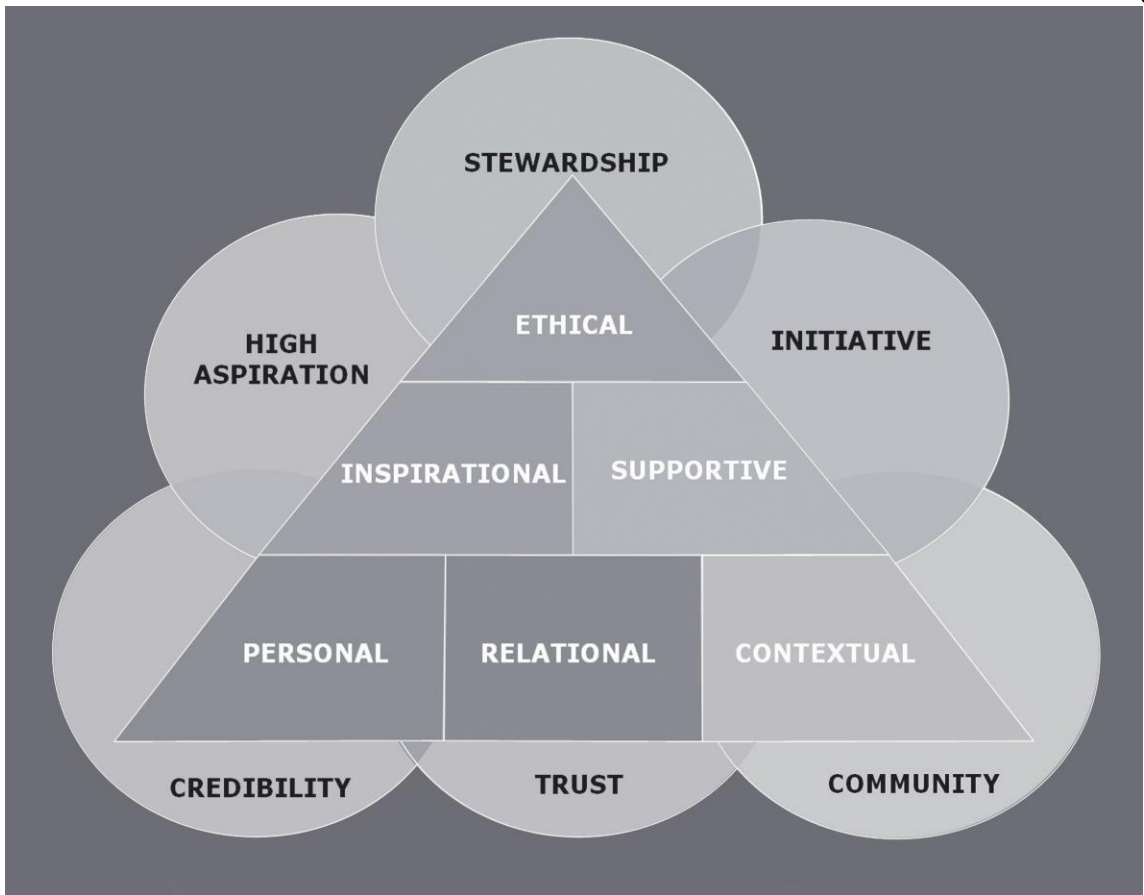


Figure 1: Sitkin, Lind, and Siang's Domains of Leadership.

The placement of the domains in the framework of leadership shows their relationship to each other and the effects they produce, as indicated by the surrounding circles. For example, the relational domain is in the center because leadership is ultimately about the leader-follower dynamic, and its effect of trust is an element that percolates through all types of leadership situations. The three foundational domains become the building blocks for the next tier of domains; these are inspirational and supportive leadership. For ethical leadership at the pinnacle to be most effective, all five supporting domains must be in place (Sitkin, Lind, and Siang, 2006, p. 28).

Personal leadership has been defined as leaders needing to be seen as personally capable of leading, as authentic, and as dedicated to the team (Sitkin, Lind, and Siang, 2006, p. 29). Bass (1985) defines transformational leadership in terms of how the leader

affects followers' development of trust, admiration and respect for the leader. Transformational leaders seek to lift individuals from idolizing the individual to directing the followers' commitment and energies towards the organization and its goals (Wren, 1995).

Burns (1978) defines transformational leadership as the leader and follower acting as a system to assist each other's improvement in all facets of life. Transformational leaders instill pride, faith and respect, have a gift for seeing what is really important, and transmit a sense of mission which is effectively articulated (Lowe & Sivasubramaniam, 1996). Barbuto (1997) defines transformational leaders as being able to arouse strong emotions; increase follower identification with the leader; serve as coaches, mentors to the followers; and empower followers to become champion problem solvers, who are able to function effectively without the presence of the leader.

More recent definitions that have traces to Sitkin, Lind, and Siang (2006) description of personal leadership include ideological and authentic leadership. Strange and Mumford and Strange (2002) described ideological leadership in terms of the leader stressing values, standards and the meaningfulness of these standards to justify actions when leading others. Ilies, Morgeson and Nahrgang (2005) described authentic leadership as contributing to the eudaemonic (i.e. the context of realizing one's true potential across one's lifespan, p. 375) well-being of leaders and followers.

Relationship leadership is delineated in terms of the ability of leaders to demonstrate understanding and respect for the follower and care for that individual's welfare (Sitkin, Lind, and Siang, 2006, p. 29). For instance, it has been reported that transformational leaders instill pride, faith and respect, have a gift for seeing what is really important, and

transmit a sense of mission which is effectively articulated (Lowe & Sivasubramaniam, 1996). One could also argue that servant leadership literature addresses these attributes of leaders as well. Greenleaf (1970) described servant leadership as the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant; first to make sure that other people's highest priority needs are being served (p. 4). Relationship leadership has roots in moral leadership which is defined in terms of leaders leading with the mere focus of meeting the fundamental wants and needs, aspirations, and values of their followers (Wren, 1995, p. 483).

Contextual leadership is described as leaders creating a sense of communal identity for the team by helping the members see what the team's values and mission are and what the team stands for as a whole (Sitkin, Lind, and Siang, 2006, p. 30). One could find connection between this description and that of charismatic and transformational leadership. The first component of charismatic leadership is centered on creating a clear picture of a yearning future which helps to generate a sense of identity and excitement among followers. This picture is critically important simply because followers would begin to develop commitment, a common goal to rally around and to feel successful (Wren, 1995, p. 109). Additionally, transformational leadership occurs when a leader inspires followers to share a vision, empowering them to achieve the vision, and provides the resources necessary for developing their personal potential (Smith, Montagno and Kuzmenko, 2004, p. 80).

Inspirational leadership is defined in terms of creating a climate and expectation of excellence, generating the will to reach higher, and infusing the team with the enthusiasm

and optimism for getting there (Sitkin, Lind, and Siang, 2006, p. 30). Inspirational motivation refers to leaders passionately communicating a future idealistic organization that can be shared (Barbuto, 1997). Based on this delineation one could argue that inspirational leadership is connected to transformational leadership and specifically, inspirational motivation. Another leadership approach, Visionary leadership, consists of three major aspects: (a) constructing a vision, creating an ideal image of the organization and its culture, (b) defining an organizational philosophy that succinctly states the vision and developing programs and policies that put the philosophy into practice within the organization's unique context and culture, and (c) is centered on the leaders own practices, the specific actions in which leaders engage in a one-to-one basis in order to create and support their vision (Wren, 1995, p. 403).

Supportive leadership is characterized as providing a sense of security to the team so that members will take intelligent risks and continue to grow in their roles (Sitkin, Lind, and Siang, 2006, p. 31). One of the characteristics of transformational leadership is intellectual stimulation which focuses on leaders' behaviors to foster creativity as well as their ability to stimulate innovative thinking among followers (Bass, 1985). A more recent definition looks at the transformational leader's ability to arouse followers to think in new ways and emphasizes problem solving and the use of reasoning before taking action (Barbuto, 1997). These definitions share some of the same tenets of supportive leadership.

Ethical leadership is described in terms of leaders acting as role models for their organization and they develop others into role models as well. They personify the organization, and through their action, they show by example how to integrate the values

espoused by the organization in a way that is true to their own values (Sitkin, Lind, and Siang, 2006, p. 32). An obvious connection to this definition is found in transforming, spiritual and servant leadership. Burns (1978) asserted that transforming leadership in a sense is closely connected to morality since it raises the level of human conduct and ethical aspiration between leader and follower. Fry (2003) defined spiritual leadership in terms of the leader's focus on integrity, cultivating a sense of meaning, trust, hope and purpose within his or her institution. This definition also has similar characteristics of servant leadership since servant leaders emphasize increased service to others, a holistic approach to work, a sense of community, and shared decision-making (Spears, 1995). Servant leadership emphasizes the ethical responsibilities to followers, stakeholders, and society (Van Wart, 2003).

Purpose of Study

The purpose for focusing on the historical and modern views of leadership as well as the domains of leadership in the preceding sections was to articulate a clear picture for the importance of this study. Given a historical and modern view serves to help others understand that studies on leadership take many different approaches and can be studied in different contexts. The primary purpose of this study is to examine whether there is a relationship between individuals who participate in community service through intercollegiate athletics and the attributes of servant leadership. The secondary purpose of this study is to examine whether gender influences the relationship between intercollegiate athletes who participated in community services and the attributes of servant leadership.

Research Questions

1. Is there a relationship between servant leadership behaviors and college student-athletes number of years of participation in community service programs at the college level?
2. Is the relationship between college student-athletes' development of servant leadership behaviors and participation in community service programs moderated by gender?

Definitions of Terms

A **student athlete** (sometimes written **student–athlete**) – “is a participant in an organized competitive sport sponsored by the educational institution in which he or she is enrolled” (http://en.wikipedia.org/wiki/Student_athlete).

Servant Leadership- “it begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant-first to make sure that other people’s highest-priority needs are being served. The best test is: Do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants” (Greenleaf, 1970, p. 4).

Altruistic Calling - “A desire to serve and willingness to sacrifice self-interest for the benefit of others” (Barbuto & Wheeler, 2006, p. 305).

Emotional Healing - “The ability to recognize when and how to foster the healing process to people’s broken spirits and emotional pain” (Barbuto & Wheeler, 2006, p. 306).

Wisdom - “The ability to notice what is happening by picking up cues in the environment” (Barbuto & Wheeler, 2006, p. 307).

Persuasive Mapping - “Fostering an environment that uses mental models and encourages lateral thinking” (Barbuto & Wheeler, 2006, p. 307).

Organizational Stewardship - “The belief that organizations have a legacy to uphold and must purposely contribute to society” (Barbuto & Wheeler, 2006, p. 308).

Transformational leadership - The leader and follower acting as a system to assist each other’s improvement in all facets of life (Burns, 1978).

Personal leadership - Needing to be seen as personally capable of leading, as authentic, and as dedicated to the team (Sitkin, Lind, and Siang, 2006, p. 29).

Relationship leadership - The ability of leaders to demonstrate understanding and respect for the follower and care for that individual’s welfare (Sitkin, Lind, and Siang, 2006, p. 29).

Contextual leadership - Leaders creating a sense of communal identity for the team by helping the members see what the team’s values and mission are and what the team stands for as a whole (Sitkin, Lind, and Siang, 2006, p. 30).

Inspirational leadership - Creating a climate and expectation of excellence, generating the will to reach higher, and infusing the team with the enthusiasm and optimism for getting there (Sitkin, Lind, and Siang, 2006, p. 30).

Supportive leadership - Providing a sense of security to the team so that members will take intelligent risks and continue to grow in their roles (Sitkin, Lind, and Siang, 2006, p. 31).

Ethical leadership - Leaders acting as role models for their organization and they develop others into role models as well. They personify the organization, and through their action, they show by example how to integrate the values espoused by the organization in a way that is true to their own values (Sitkin, Lind, and Siang, 2006, p. 32).

Assumptions

1. It is assumed that student-athletes can develop antecedent servant leadership behavior(s) as a result of participating in intercollegiate athletics and being exposed to community service work and projects through their institutions.
2. It is assumed that student-athletes development of servant leadership behavior(s) as a result of participating in intercollegiate athletics will vary between the different academic class standing.
3. It is assumed that the student-athletes' development of servant leadership behavior(s) as a result of participating in intercollegiate athletics will differ by gender.
4. It is assumed that each student-athlete at both universities participated in community service with an average number of 26 hours per student-athlete.

Limitations

Limitations of this study included a small sample size which makes generalization of the study's findings limited to only two large Midwestern universities in Nebraska. Also, not all intercollegiate sporting teams from both institutions participated in this study, the study's findings is limited only to a few sporting teams. Student-athletes had limited or

no knowledge of the servant leadership philosophy which made it difficult for them to clearly understand what this philosophy of leadership entails.

Delimitations

A delimitation of this study included the selection of participants which was strictly student-athletes from two large Midwestern universities. Another delimitation was that the Servant Leadership Questionnaire was the only instrument used to measure outcomes in student-athletes' participation in intercollegiate athletics. The researcher's bias was also a delimitation of this study given that he was a former student-athlete.

Significance of Study

This study addresses whether individuals participating in sporting settings such as intercollegiate athletics develop aspects of servant leadership. If a relationship is found and the null hypotheses are rejected, the implication of this study would be significant to the leadership field. Presently, there is no study of servant leadership being used to measure leadership development behaviors of student-athletes in the literature. This study is the first of its kind and the findings will be beneficial to the literature pertaining to the study of student-athletes' servant leadership development. By exploring the impact of participation in athletics, researchers and scholars will be provided with findings pertaining to the applicability of servant leadership in sporting settings specifically intercollegiate contexts.

For the purpose of this study intercollegiate athletics includes participation in (men's and women's soccer, women's rifle, men's and women's gymnastics, men's and women's cross country, volleyball and women's basketball). The approach of this present study is critical in that it provides other researchers with findings in athletics and it

creates an opportunity for the researcher to present a strong comprehensive proposal for servant leadership to be studied in sporting contexts.

Chapter II

Literature Review

Theoretical Framework

Greenleaf (1970) instigated a new leadership philosophy. One that was unique in its approach to the leader-follower relationship, and that new philosophy was named servant leadership. Servant leadership emphasizes the ethical responsibilities to followers, stakeholders, and society (Van Wart, 2003). According to Greenleaf;

“it begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead. The difference manifests itself in the care taken by the servant-first to make sure that other people’s highest-priority needs are being served. The best test is: Do those served grow as persons; do they, while being served, become healthier, wiser, freer, more autonomous, more likely themselves to become servants (1970, p. 4; Wren, 1995, p. 22).”

A number of scholars over the years have conducted research on servant leadership, some to examine its applicability in organizations, while others to develop a framework that can be operationalized. Below is a summary of servant leadership viewpoints and findings.

Servant Leadership Viewpoints and Findings

Sendjaya and Sarros (2002) studied the origin, development, and application of servant leadership in organizations. They concluded that servant leaders portray resolute conviction and strong character by taking on not only the role of a servant, but also the nature of the servant (pp. 62-63).

Fry (2003) described servant leadership and its calling from a spiritual leadership perspective viewing it as an inner-self or higher authority call to serve others. Reave (2005) also took on a spiritual approach and noted that leaders who emphasize spiritual values that view work as a calling are usually able to awaken a latent motivation in employees which is positively related to job satisfaction.

Eicher's (2005) study on the myth of servant leadership from a feminist perspective indicated new insights regarding this theory. For instance, the author conducted a semiotic analysis of the gendered language and discourse that constitutes servant leadership and argued that despite the gaining popularity of this theory, it appears to further perpetuate a mythical theology of leadership for organizational life that upholds androcentric patriarchal norms. This viewpoint provided a different dimension for further research on servant leadership which could influence scholars to examine the theory's connotation to determine if it indeed has a gender bias tone.

Barbuto and Wheeler's (2006) study on the scale development and construct clarification of servant leadership indicated that servant leaders create serving relationships with their followers. An implication of this position relates to the potential of this approach to influence strong leader-follower relationships within organizational settings that are based on the common purpose of service.

Neill, Hayward and Peterson's (2007) study focused on students' perception of the interprofessional team in practice through the application of servant leadership principles. A significant finding in this study indicated that when servant leadership principles were applied it enhanced professional practice by building and strengthening relationships among students in the community which resulted in a greater appreciation of the

contributions and expertise of varied disciplines. This study exemplified servant leadership in practice as well as its applicability to influence positive leadership behaviors among followers to achieve tasks.

Sendjaya, Sarros and Santora (2008) studied defining and measuring servant leadership behavior in organizations. They delineated this philosophy as an altruistic leadership style mainly because it has the potential to contribute to the development of positive attitudes in followers, most notably citizenship behavior.

Neubert, Carlson, Roberts, Kacmar and Chonko's (2008) study on the regulatory focus as a mediator of the influence of initiating structure and servant leadership on employee behavior noted that, the leaders who modeled a servant leadership approach induced a focus on nurturance and aspirations. This viewpoint suggests that the leader's servant leadership behavior has the potential to thrive effectively in organizational contexts just like other leadership theories have accomplished. The key factor for successful servant leaders would be based on what leadership behaviors leaders of organizations want their employees to depict.

Jaramillo, Grisaffe, Chonko and Roberts' (2009) study examined the impact of servant leadership on sales force performance and revealed that servant leadership conceptually and empirically relates to sales success. According to the authors, the first implication is that servant leadership creates genuine customer focus and a related chain of associated positive outcomes and second, it appears to contribute to higher levels of performance-enhancing the salesperson's well-being. This work extends other works which have shown that the application of servant leadership within organizations can have profound

effects on employees' wellness and ethical development (Graham, 1991; Jaramillo, Grisaffe, Chonko and Roberts, 2009).

The 10 main characteristics of Greenleaf's servant leadership are: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, growth, and community building.

Listening, servant leaders engage in frequent periods of inner reflection to better understand themselves as they grow first as individuals, and then as leaders (Spears, 1995). Burns (1978) argued that in order for a leader to transform an organizational culture comprehensively and effectively, he or she would have to listen and know the major stakeholders to better understand their perception and needs. Bechler and Johnson (1995) concluded in their study of leadership in small groups that there is a relationship between listening skills and leadership effectiveness. Wolvin (2005) reported that listening leaders communicate with followers to understand their needs, motivations, and issues; but more importantly to lay the foundation for good decision-making to achieve organizational goals. Barbuto and Wheeler (2006) defined listening in terms of the leader's ability to hear and value the ideas of followers. Brownell (2008) noted that when leaders listen effectively they can create learning environments that then facilitate the implementation of the strategies they propose.

Empathy, servant leaders strive to understand and empathize with others. People need to be accepted and recognized for their special and unique spirits (Spears, 1995). Humphrey (2002) found empathy to be a key trait, and it plays an important role in predicting leadership emergence. Kellett, Humphrey and Sleeth (2006) identified empathy with regard to its mediating ability to identify others' emotions and the ability to

express one's own emotions on both relationship and task leadership. Barbuto and Wheeler (2006) described empathy as being able to appreciate the circumstances that others face. Goleman (1998) Greer and Plunkett (2007) reported that empathy allows leaders with high emotional intelligence to factor in employees' feelings when making decisions. These leaders spend the necessary time listening and are in tune with how others feel.

Healing, learning to heal is a powerful force for transformation and integration. One of the great strengths of servant-leadership is the potential for healing one's self and others (Spears, 1995). Barbuto and Wheeler (2006) characterized healing as the leader's skill to recognize when and how to foster the healing process. Greer and Plunkett (2007) reminded leaders of the importance of providing support, coaching and mentoring to followers during difficult times.

Awareness, general awareness and especially self-awareness, strengthens the servant-leader (Spears, 1995). Barbuto and Wheeler (2006) defined awareness as the leader's skill to be attuned to what is happening by picking up cues in the environment. Greer and Plunkett (2007) reported awareness as the leader's understanding of how pressures and influences from others affect his or her own behavior toward others (p. 271). Gardner, Avolio, Luthans, May and Walumbwa (2005) characterized awareness as a process where a leader engages in inner-reflection of his or her unique values, identity, emotions, goals, knowledge, talents and/or capabilities, which typically is influenced by external events. Ilies, Morgeson and Nahrgang (2005) reported that self-awareness is rooted in a leader's emotional intelligence and it includes being aware of one's strengths and weaknesses as well as understanding one's emotions and personality.

Persuasion, a servant-leader relies on persuasion, rather than using one's positional authority (Spears, 1995). Servant leaders are instrumental in gaining the consensus and support from those they lead before making important group decisions. Barbuto and Wheeler (2006) described persuasion in terms of the leader's skill to influence others' behaviors without having to use formal authority. Persuasion is rooted in both charismatic and transformational literature. Bass (1996) defines this in terms of how the leader affects followers, who are intended to trust, admire and respect him or her. These leaders seek to lift individuals from idolizing the individual to directing the followers' commitment and energies towards the organization and its goals (Bass, 1996). Sendjaya, Sarros and Santora (2008) noted that the influence servant leaders have on followers is a collective effort as opposed the leaders' legitimate authority. That is, both leader and follower play a role in influencing the desired behavior.

Conceptualization, servant-leaders seek to nurture their abilities to "dream great dreams" (Spears, 1995, p. 6). The ability to look at a problem (or an organization) from a conceptualization perspective means that one must think beyond day-to-day realities (Spears, 1995). Mumford and Strange (2002) reported that a leader's vision and its content represent a powerful influence on his or her organizational performance and success. Servant leaders envision not only short-term goals and realities but more importantly conceptually think about the future. Barbuto and Wheeler (2006) defined conceptualization as leaders creating a fostering environment which supports lateral thinking and is based on mental models. Sendjaya, Sarros and Santora (2008) reported that servant leaders through their vision and leading by example behaviors, can influence followers to think and develop emotionally, intellectually, socially and spiritually.

Foresight, servant leaders have a unique ability to understand the lessons from the past, the realities of the present, and likely consequences of a decision for the future (Spears, 1995). It is worth noting that this characteristic is perceived to be something that the servant leader is born with, which cannot be consciously developed as compared to other servant leadership characteristics (Spears, 1995). Fry (2003) argued that leaders need to have a clear and compelling vision of the near and distant future in order to influence followership behind a leadership objective. Barbuto and Wheeler (2006) defined foresight in terms of a leader's ability to anticipate the future while being mindful of its consequences. Sendjaya, Sarros and Santora (2008) reminded us of another important ability of servant leaders which is to have a sense for the unknowable, as well as to be able to foresee the unforeseeable.

Stewardship, refers to the servant leader holding something in trust for another (Spears, 1995, p. 6). The servant leader has a strong commitment and passion to serving the needs of others (Spears, 1995). Barbuto and Wheeler (2006) delineated stewardship as a belief within organizational contexts that they have a legacy to uphold and must purposefully contribute to society. Sendjaya, Sarros & Santora (2008) reiterated the focus of servant leaders which is on individual followers within and outside their organization. Serving others first, takes precedence over organizational goals and objectives. This work extends Graham (1991) by reminding organizations that their practices and policies must benefit all major stakeholders including members in the community.

Commitment to the *growth* of people, the servant-leader creates a positive environment which is conducive to the development of people. That is, followers of servant leaders gain personal, professional and in some cases spiritual growth because of

the time devoted by their leaders to ensure their growth (Spears, 1995). Research has shown that there is a positive effect on employees' motivation when their leaders demonstrate the commitment to help each of them develop personally and professionally (Barbuto & Scholl 1999; Leonard, Beauvais & Scholl, 1999). Grawitch, Gottschalk and Munz (2006) examined the importance of leaders in organizations providing opportunities for employees to learn new skills and ways of completing tasks since it is related to employees' motivation and overall positive organizational outcomes. Barbuto and Wheeler (2006) described growth as the ability of the leader to first identify his or her followers' need and second to provide the opportunities for them to develop. Howell and Avolio (1993) reported that leaders can strengthen the leader-follower relationship by creating new learning opportunities for followers to achieve their fullest potential which involves more than routine job responsibilities.

Building community, servant leaders are pioneers of building community within the organization in which they operate. These leaders foster in followers the idea that through their individual contributions they can build stronger communities.

“All that is needed to rebuild community as a viable life form for large numbers of people is for enough servant leaders to show the way, not by mass movements, but by each servant leader demonstrating his/her own unlimited liability for a quite specific community related group (Spears, 1995, p. 7).”

Barbuto and Wheeler (2006) identified building community as a leader's skill to create an organizational environment that fosters a sense of serving one's community. Bono, Shen

and Snyder (in press) suggested that when people are exposed to and participate in community volunteer work, they tend to become more involved in their communities.

Why Servant Leadership?

Servant leadership was chosen for this study because after conducting an exhaustive review of the literature it appears that most of the researchers and scholars who have written articles or conducted research on this leadership approach focused extensively on its application in organizational contexts, specifically the manager-employee relationship. (Graham, 1991; Sendjaya & Sarros, 2002; Smith, Montagno, & Kuzmenko, 2004; Barbuto and Wheeler, 2006; Neubert, Carlson, Roberts, Kacmar and Chonko, 2008; Sendjaya, Sarros & Santora, 2008; Jaramillo, Grisaffe, Chonko and Roberts, 2009). However, there are other contexts that servant leadership can be studied to further the scope of this approach. With regard to other leading theories such as transformational, transforming and charismatic leadership, servant leadership is considered to be relatively new in the continuum. Hence, this study will look at a new relationship that is, student-athletes and their exposure to servant leadership via their institutional involvement in athletics and community service work.

Thus far, the researcher has provided a theoretical background of servant leadership, historical and modern views of leadership as well as domains of leadership. The objective was to provide the reader with a background regarding what the servant leadership approach entails, to explore its historical roots and to set the foundation for this study's purpose. As part of the researcher's passion and commitment to initiate this movement, in the next section is a brief summary of major findings pertaining to the positive outcomes of participating in sports and intercollegiate athletics. This researcher's goal is to build a

strong proposal which could influence other researchers to broaden their focus of study in servant leadership to include intercollegiate contexts.

Key Findings of participating in Sports and in Intercollegiate Contexts

Research has shown that participating in intercollegiate athletics helps athletes to develop self-discipline, team work, cooperation, hard work, self-confidence, pride in accomplishment, competitive spirit, and how to deal with failure (Richards and Aries, 1999, p. 211).

Richards and Aries (1995) found that student-athletes' participation in intercollegiate athletics was related to their growth and development. For instance, these athletes self-reported growing as individuals, getting exposure to different cultural backgrounds, understanding their place in college and pursuing new activities in the process. Their study also supports Taylor's (1995) work which reported that participation in intercollegiate athletics has a positive impact on the student-athletes' self-esteem.

Wolf-Wendel, Toma and Morphey (2001) reported that building community is the best way to improve the quality of life on campus and that intercollegiate athletics was the most notable example in higher education of creating community among students and others who are different from each other. This study showed the importance of participating in intercollegiate athletics since it can serve to bring people of different backgrounds together.

Potuto and Hanlon's (2006) national study of student-athletes regarding their experiences as college students described vividly, and in some cases verbatim, how student-athletes view their coaches, educational experiences, institution, community and overall college life. In summary, this study supported findings of previous research on

student-athletes' development (Ryan, 1989; Richards & Aries, 1995). For instance, student-athletes viewed their participation in intercollegiate athletics as significantly helping to enhance their all-round personal, professional and spiritual leadership development. This included their sense of willingness to serve their institutions and community wholeheartedly, respect for diversity and other cultures, as well as their overall academic performance.

Long and Caudill's (1991) study on the impact of participation in intercollegiate athletics on income and graduation, reported that in the 1980s males between the ages of 28 and 30 who participated in intercollegiate athletics were estimated to receive 4% higher incomes than similar non-athletes. It can be assumed that employers view potential employee candidates as appealing when their resumes indicate participation in extra-curriculum activities during their college career. Another assumption is that employers may attribute a certain level of leadership development in student-athletes versus non-athletes because of their exposure to different environments during college.

Watten, Foxcroft, Ingebrigtsen and Relling (2002) examined teenage alcohol and intoxication: the impact of family socialization factors, living area and participation in organized sports. They found that participation in sports was a factor for delaying alcohol debut (i.e. teenagers due to their involvement in sports adhere to self-discipline and avoided consuming alcohol). A significance of this is that individuals who participate in sports refrain from consuming alcohol as a result of the negative consequences that may be associated with alcohol consumption and physical activity and the strict rules imposed by sports organizations and coaches. Participation in sports teaches discipline and life

skills that impacts individuals' overall well-being (Potuto and Hanlon, 2006; Potuto and James, 2007).

Furthermore, Diacin, Parks and Allison (2003) study concerned male athletes use of performance-enhancing substances and drug testing in intercollegiate athletics. This study indicated that despite the inconsistencies regarding previous research findings between academic and athletic environments on student athletes, it can be noted that student-athletes tend to refrain from consuming drugs in part because of their coaches, teammates, peers and importantly because of the privilege of representing their institutions at the highest levels of college sports. These athletes develop self-discipline, healthy lifestyles and more importantly they understand the importance of being good role models for their institutions and community.

White, Duda and Keller (1998) explored the relationship between goal orientation and perceived purposes of sports among youth sport participants. This study indicated that participation in athletics can have profound effects on individuals such as a desire for mastery, cooperation, hard work ethic, enhancement of self and/or sport ethos, promotion of good citizenship, increased need to compete, and encouraging an active lifestyle for youth and high school athletes.

Gayles and Hu (2009) reported on the influence of student engagement and sport participation on college outcomes among Division I student-athletes. Overall the authors found that student-athletes did not differ from non-athletes in engaging in educationally purposeful activities and that their involvement was associated with positive gains such as development of personal self-concept as well as learning and communication skills.

Blinde and Taub (1999) explained that participation in sports and physical fitness activities can represent a means by which individuals with physical and sensory disabilities empower themselves. This study demonstrated the importance of participation in athletics for helping individuals develop personal growth despite their physical conditions.

Ślubowska (2007) studied practicing competitive sports at an earlier age as an important determinant of women's participation in physical recreation. It was reported in this study that long-term involvement in a sport at a competition level positively influenced women's decision to take up and practice intensive forms of physical recreation several years after finishing their sporting careers (Ślubowska, 2007 p. 191).

Adams-Blair (2002) examined the importance of physical education and sport in the lives of young females. This author indicated that sports participation is beneficial and should be encouraged by parents of female athletes since personal and professional development such as higher-self-esteem, self-confidence, and academic success to increased leadership abilities and achievement are linked to sports participation.

Kimball and Freysinger's (2003) study on leisure, stress, and coping explored the relationship between stress and participation in collegiate sports as a case of leisure for coping with stress. A significant finding is that experiences of stress are multi-dimensional and dynamic for student-athletes. That is, student-athletes view their participation experience for coping with stress both negatively and positively depending on the situation. And that sports participation is critical and beneficial to student-athletes since it provides a means in which they can cope with stress.

Taliaferro, Rienzo, Miller, Pigg and Dodd's (2008) study on high school youth and suicide risk examined the relative risk of hopelessness and suicidality associated with physical activity and sport participation. This study showed that vigorous activity reduced the risk of hopelessness and suicidality among male adolescents whereas low levels of activity increased the risk of feeling hopeless among young females. As was reported in this study, both males and females had increased protection against hopelessness and suicidality as a consequence of their sport participation.

Action Control Theory

The researcher grounded this study using the action control theory and Wren and Swatez's conceptual model which defined contextual aspects that influence leadership and thus leadership development (in Wren, 1995). The action control theory was developed by Kuhl (1982) based on the earlier work of Ach (1910) with the focus of explaining the process that intervenes between intention and action (Erwin and Marcus-Mendoza, 1988). According to the theorists, motivation and ability are not sufficient to account for performance of an extended action unless the action is controlled by external forces (Kuhl, 1982).

Kuhl defined action-oriented people as being capable of considering alternative plans of action and more likely to choose a goal or solve a problem (Erwin and Marcus-Mendoza, 1988). Further, it is Kuhl's view that these capabilities could be viewed as cognitive development which is broken down into four constructs. These constructs include dualism, relativism, commitment, and empathy (Perry 1970). Dualism indicates the degree to which individuals view issues in dichotomous, yes-no terms and look to authorities for the answers. Relativism indicates the degree to which individuals

recognize alternative perspectives and mediate diversity within themselves and with other people. Commitment indicates that individuals have begun to make major life decisions and accept responsibilities and consequences for these decisions. Empathetic individuals have made major life decisions but also consider their impact on other people (Erwin and Marcus-Mendoza, 1988, p. 357).

According to the action control theory, action-oriented individuals are more likely than others to ensure purposeful action. That is, these individuals are constantly looking to make a difference in society through their action. Importantly, action-oriented individuals would emerge as leaders more often than others because of their involvement. With this theoretical background in mind, it is the researcher's belief that student-athletes fall into the category of action-oriented individuals. Student-athletes are not solely involved in intercollegiate sports but are also heavily involved in community service work within their institutions (Potuto and Hanlon, 2006). These athletes engage in purposeful action daily, weekly, monthly and yearly but it seems as though not much research documents this activity.

In contrast, Wren and Swatez's conceptual model described three contexts that all have influence on leadership and leadership development. These include the historical context of leadership (long-term social forces, long-term economic forces and long-term political forces); the contemporary context of leadership (social values, cultural norms and subcultural norms); and the immediate context of leadership (structure and goals, culture and task characteristics (in Wren, 1995).

To summarize, the model (figure 2) begins with the outermost context which is the historical context of leadership. Any contemporary situation has some connection to what

has happened in the past (in Wren, 1995). From a leadership perspective, one must move beyond this truism and begin to identify with some precision the long-term trends and influences which most impact any given leadership scenario, and shape the resulting leadership options (in Wren, 1995, p. 247). For example, these trends could be long-term social, economic, political, or intellectual developments which limit a leader's potential leadership solutions.

The second context is the contemporary context of leadership and it is closely related to the first. This context of leadership represents the norms, values, and customs of the surrounding society or, the impact of cultural norms (in Wren, 1995, p. 249). It is worth noting that this context is not limited to the societal level but includes subcultures which could impact the leadership of each particular group (See Figure 2).

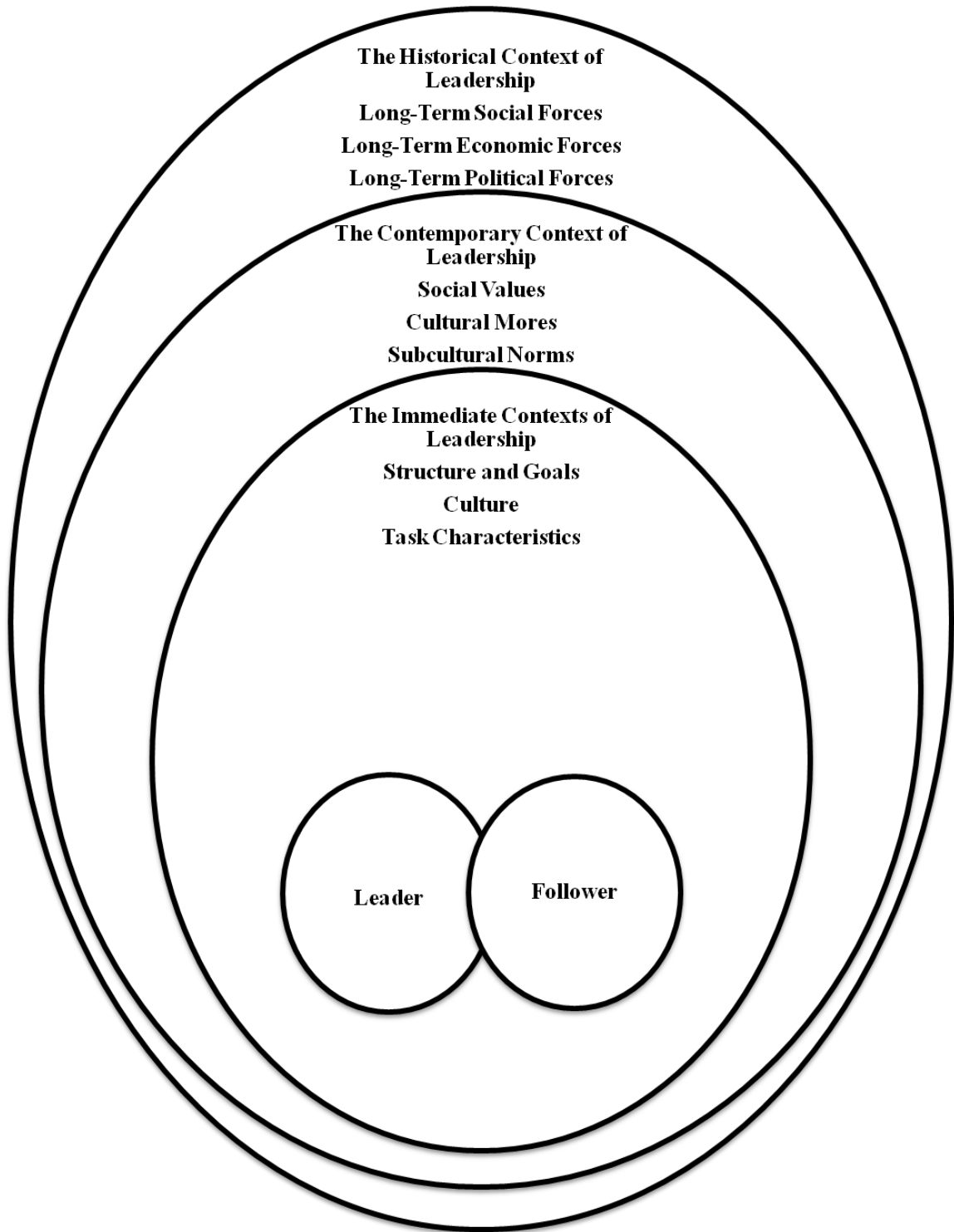


Figure 2. Adapted model of Leadership Contexts.

The third and final context is the immediate context of leadership which embraces all those more “micro” situational factors which have such an impact on leadership. These include, but are not limited to, the structure and goals of the group or organization, the culture of the organization itself, and the nature of the task at hand (in Wren, 1995, p. 250). Athletes continue to represent their institutions with pride and it is important that others are educated about the many contributions they make to help create stronger and better local communities.

Linking Servant Leadership Development of Student-Athletes to Participation in Community Service Work

All student-athletes in this study have been involved in community service work annually (Erwin, 2009; Operation Bluejay, 2009). Additionally, each team is involved in different types of community service work. The following section provides a detailed description of the services and to make the argument of how they may influence student-athletes’ servant leadership behavior development.

University A

Student-Athlete Involvement - this annual event provides student-athletes an opportunity to learn about ways that they can make a difference in their community by interacting with various charitable organizations from the local community and University campus. This event is structured to allow for casual conversation among groups of athletes and representatives from organizations that offer volunteer opportunities. The organizations represent a wide range of opportunities that include everything from mentoring young children to aiding the Red Cross (Erwin, 2009).

Education Week - National American Education Week is a week-long campaign focused on the importance of education and a practice-makes-perfect motto. This event allows student-athletes to be guest speakers in various local Middle Schools. Student-athletes share their personal experiences of education and achievements as well as answer the questions of aspiring students. Importantly, this annual event provides a chance for student-athletes to get involved and to give back to their community (Erwin, 2009).

Through organized community events like the student-athlete involvement fair and education week, University A and the Athletic Department, create an environment for student-athletes to make public service a priority. As part of the Athletic Department's strategic plan, each University A intercollegiate team must complete at least two team service projects (Erwin, 2009).

University B

The leadership environments that University B students are exposed to are constantly changing and the experience impacts their leadership development. Below is a summary of various volunteer community service work that the athletes have participated in and continue to participate in on a daily, weekly and yearly basis.

State Farm MVC Just Read Program - student-athletes volunteer their time to conduct speeches and reading lessons to local elementary schools on the importance of staying in school and obtaining an education (Operation Bluejay, 2009).

Kellom Elementary Project - student-athletes participate by volunteering their time to help with cleaning and refurbishing the school (Operation Bluejay, 2009).

Women's Build Habitat for Humanity - female student-athletes coordinate and participate in building homes for individuals in need (Operation Bluejay, 2009).

Tennis Buddies - the Men's and Women's Tennis team participated with the local Special Olympic Athletes in teaching them the basic fundamentals involved in learning and playing the sport (Operation Bluejay, 2009).

Teammates - student-athletes are active participants in a mentoring program. This program matches athletes with local children that need mentoring on topics such as life skills, leadership, discipline, education and their overall well-being (Operation Bluejay, 2009).

Friends of Jaclyn - the Women's Basketball team volunteers and adopts a local child with brain cancer to become a support network (Operation Bluejay, 2009).

In summary, student-athletes at University A, in 2009, combined to volunteer more than 3,000 service hours impacting over 100,000 people. University B student-athletes completed over 4,600 hours of community service work in 2009 which is approximately 26 hours per student-athlete. These athletes are actively involved in hospitals, schools, clinics and public speaking opportunities when there is a need to serve others in their community. Davis and Donaldson (1997) proposed that people who are in collectivistic cultures are more likely to develop principal-steward relationships than are people belonging to an individualistic culture. In a collectivistic culture, the self is defined as a part of a group whereas individualistic cultures the individual does not align to a group (Davis and Donaldson, 1997). Hence, it could be assumed that these two universities have a collectivistic culture, especially among the student-athlete.

The servant leader has a strong commitment and passion to serving the needs of others (Spears, 1995). Sendjaya, Sarros and Santora (2008) reiterated the focus of servant leaders which is on individual followers within, and outside, their organization. Serving others first, takes precedence over organizational goals and objectives. This extends the work of Graham (1991) by reminding organizations that their practices and policies must benefit all major stakeholders including members of the community. These large Midwestern universities that are part of this study may create servant leadership environments where there is a sincere belief that their institutions must be centered on positively benefiting society first, before all other goals and objectives.

Moreover, because the student-athletes are engaged in service activities there is a potential that the athletes may develop leadership behaviors such as empathy for others, a willingness to serve and help to build their community, listening skills, self-awareness to issues affecting those in the community and providing that extra support to help heal community members broken spirits during difficult times. Barbuto and Wheeler (2006) identified building community as a leader's skill to create an organizational environment that fosters a sense of serving one's community. Bono, Shen and Snyder (2010) suggested that when people are exposed to and participate in community volunteer work, they tend to become more involved in their communities.

Motivation and ability are not sufficient to account for performance of an extended action unless the action is controlled by external forces (Erwin & Marcus-Mendoza, 1988). These large Midwestern universities that are part of this study operate under a servant leadership philosophy and they create opportunities for their student-athletes to gain exposure to different environments which would contribute to their leadership

growth and development. Servant leaders are pioneers of building community within the organization in which they operate. These leaders foster in followers the idea that through their individual contributions they can build stronger communities (Spears, 1995). The servant leader creates a positive environment which is conducive to the development of people. That is, followers of servant leaders gain personal, professional and in some cases spiritual growth because of the time devoted by their leaders to ensure their growth (Spears, 1995).

Moreover, University A and B understand that their student-athletes need exposure to leadership challenges in and out of the classroom (Erwin, 2009; Operation Bluejay, 2009). The implications of exposing student-athletes to these challenges would equip them with the necessary skills needed to cope with, and overcome, future leadership challenges they may face. Barbuto and Wheeler (2006) described growth as the ability of the leader to first identify his or her followers' need, and second, to provide the opportunities for them to develop. Howell and Avolio (1993) reported that leaders can strengthen the leader-follower relationship by creating new learning opportunities for followers to achieve their fullest potential.

Development of Leadership behaviors

Petitpas and Champagne (1988) studied the developmental programming of intercollegiate athletes. The different levels of psychoeducational programming development for student-athletes are first, second, third and fourth/fifth years were described.

The first year of a student-athlete's college life he or she goes through a self-exploration phase while beginning to take on more responsibility for his or her own

learning. But they are still externally controlled by significant others in their environment (Petitpas and Champagne, 1988, p. 456). Because this is the exploration phase for freshmen student-athletes, they may not fully understand the importance of serving their community through their institutions' organized community service activities. The athletes may not grasp the merits or purpose in these activities as opposed to (sophomore, junior, and senior) athletes who, in most instances, would have at least a year of community service participation. For this reason it is very likely that freshmen student-athletes could be inclined to view the activities as useless and a waste of their time. However, because freshmen athletes are being exposed to a new set of institutional norms, values, and customs and are surrounded by coaches and teammates who may develop an action-oriented philosophy as a result of their previous volunteered community service experience; their leadership development is still impacted because they get the exposure to new leadership behaviors through serving others in the community. The contemporary context of leadership (Wren, 1995), is what influences the servant leadership behavior development of the freshmen student-athletes. These are the team norms, values, and customs which all interplay to influence leadership and leadership development of freshmen athletes (Wren, 1995).

The second year involves self-exploration. But the focus is on challenging dualistic thinking and attitudes. The process of experimentation with new behaviors comes into focus. Student-athletes begin to recognize the advantages of exploratory behavior and the importance of having meaningful alternatives from which to choose (Petitpas and Champagne, 1988, p. 456). With regard to servant leadership behavior development, sophomore student-athletes have a year of organized participation in community service

work. At this level, the student-athletes may begin to appreciate and understand the purpose of their institutions and coaches exposing them to volunteer community service work. The meaning of serving one's community may begin to make sense to the athletes. Also, student-athletes may begin to initiate and seek opportunities to volunteer their services to engage in community service work. One of the major changes in this level for student-athletes, is their developmental mind of thinking that they are action-oriented people who have a responsibility to help and serve others (Erwin and Marcus-Mendoza, 1988). Both the contemporary and immediate contexts of leadership are involved in this level. Institution and team norms, values, culture and customs (contemporary context Wren, 1995) all influence student-athletes' servant leadership behavior development.

The third year reinforces the benefits of exploratory behavior and relativistic thought. This goal is accomplished through the continuation of the support group (team-mates, class-mates) initiated during the second year and the introduction of career exploration through the use of alumni, coaches, and professional athletes (Petitpas and Champagne, 1988, p. 456). With two years' experience participating in organized institutional volunteer community service work, the junior student-athletes should fully understand the purpose of serving their community. The athletes may begin to collaborate with support groups on and off campus regarding opportunities to serve their communities without being required to do so by their institutions or coaches. This attributes to their development and belief that they are action-oriented individuals with a desire and commitment to serve others wholeheartedly (Erwin and Marcus-Mendoza, 1988). There is a leadership environment among the athletes which is divided into a subculture,

structure, beliefs and a set of goals (immediate context Wren, 1995) that influence them to pursue volunteer community service work.

The fourth and fifth year, if necessary, is to assist student-athletes in preparing for the transition after college. The focus of the support groups shifts from personal and career exploration to career implementation and initial commitments (p. 457). At the senior level, student-athletes may begin to conceptualize individual roles within their own communities. For instance, their aim would be to structure and implement personal goals and objectives and to take ownership for the overall success of these volunteer community service work initiatives. All the experiences learned throughout their college years regarding serving others are utilized within their respective communities. As action-oriented individuals the athletes could develop antecedent servant leadership behavior and could exemplify them in their personal and professional lives after college. The key factor is that historical, contemporary and immediate contexts of leadership (Wren, 1995) are all interplaying to impact the student-athletes antecedent servant leadership behavior development.

Linking Servant Leadership to Academic Standing

Leadership in sports has been extensively studied in the last four decades. Some scholars have proposed models to examine the coach-player relationship while others to explain which coaches' behaviors are more likely than others to trigger a desired response in players (Chelladurai & Saleh, 1980; Chelladurai & Carron, 1983; Chelladurai, 1984; Case, 1987; Smoll & Smith, 1989; Chelladurai, 1990; Chelladurai & Reimer, 1995). However, the study on specific student-athletes leadership development has been scarce. This situation is unfortunate and surprising given that the intercollegiate

athletic environment provides an excellent context for scholars to examine student-athletes leadership development. Further, insights gained in this setting could be used to help develop and implement programs to enhance student-athletes leadership development. In the proceeding section linkage will be made regarding student-athletes and their potential servant leadership development.

Ryan's (1989) study reported that student-athletes who participated in intercollegiate athletics self-reported growth in interpersonal skills and leadership abilities, as well as reported an overall satisfactory college experience. While the specific types of leadership development student-athletes gain during their participation, were not clearly reported results indicate that they develop emotional responsiveness, self-efficacy and social supportiveness skills.

Kao (2009) reported that college student volunteers eagerly devote their time and skills to benefit those receiving their services, and students, in return, also benefit (p. 872). One of the most important benefits of student-athletes' voluntary experience is that they will likely continue their voluntary work in the future. Kao also stated that emotional intelligence is an important construct among psychological, educational and management research and defined it as a set of abilities which can help people to understand and regulate their emotions and use their emotions to direct their activity in positive and productive channels (p.872).

Research has shown that student-athletes have accepted the call to serve others in their communities via volunteer work which positively impacts the lives of members of the community as well as contributes to the athletes' overall leadership development (Potuto & Hanlon, 2006). An implication of this finding posits that student-athletes could gain

leadership development, specifically the servant leadership subscale altruistic calling outside of the traditional educational classroom setting.

Dobosz and Beaty (1999) reported that athletic participation appears to increase the potential ability in student-athletes to lead. This supposition could be linked to servant leadership development, specifically the subscale altruistic calling because of the desire to serve and lead others. Barbuto and Wheeler (2006) defined altruistic calling as a desire to serve and willingness to sacrifice self-interest for the benefit of others (p. 305).

Beam, Serwatka and Wilson's (2004) study on the preferred leadership of NCAA Division I and II intercollegiate student-athletes found that males and females had differences in behavior preferences. For example, females preferred democratic behaviors whereas males autocratic behaviors with regard to their coaches' leadership behaviors delegating tasks and objectives. Based on this finding one could assume that student-athletes are capable of picking up on cues in their environments and displaying the appropriate behaviors given the situation. These athletes recognize changes in their coaches' demeanor or the environment in which they operate and make the necessary adjustments to cope and compete successfully.

Murray (2006) argued that while humanity unquestionably needs more adequate models, it is a deeper understanding of models and the modeling mind that is essential to cognitive/ethical/spiritual evolutionary development (p. 2). Murray advocates that a major tenet of leadership is to help followers develop epistemic sophistication that helps people think and dialog about "I don't know," "I'm absolutely sure," "I disagree" and "prove it!" in productive and respectful ways. With regard to student-athletes this study indicates that if they are to develop mental models regarding the servant leadership

component of persuasive mapping, this process will require that they receive support from others.

Moreover, Connelly et al (2000) found that leader skills and knowledge contribute something to the leadership criteria beyond what is contributed by general cognitive ability, personality, and motivation (p. 81). Hence, it is important to examine the student-athletes' leadership attributes, specifically creative thinking to better understand their capacity to develop the servant leadership component persuasive mapping within their institutions.

Ricketts and Rudd (2002) reported that education institutions have proven over the years to be inefficient pertaining to youth leadership development. These scholars proposed a comprehensive leadership model to train, teach, and develop leadership in youth. The five dimensions of youth leadership development are: (1) leadership knowledge and information, (2) leadership attitude, will, and desire, (3) decision making, reasoning, and critical thinking, (4) oral and written communication skills, and (5) intra and interpersonal relations. An important implication of this study, as it relates to student-athletes, is that the capacity for them to develop mental models for critical thinking may be limited since educational institutions have failed to develop programs aimed at eliminating this deficiency.

Hernandez's (2007) study on promoting stewardship behavior in organizations explored the relational and motivational leadership behaviors that may promote stewardship in organizations. It was argued that individual members taking psychological ownership of the company they belong to, and internalization of its values, may be at once instrumental in creating stewardship behaviors in organizations and detrimental to

fostering individual responsibility in organizational actors to behave ethically (p. 126). This study suggests that individuals working as a group as opposed to individuals to achieve organizational objectives may exert less effort and thus become social loafers. Hence, it is likely that even though student-athletes are exposed to organized volunteer community service work as a collective unit, individually understanding and believing that he or she has to make a positive contribution to society may not resonate with each athlete.

Reinke's (2004) study explored the relationship between perceptions of leadership and the level of trust between employees and supervisors. There were strong correlations among the different components (openness, vision and stewardship) of servant leadership. This study indicated that servant leadership can improve organizational performance due to its potential to create organizational trust among members. In addition, this study also suggests that because there is lack of empirical research on servant leadership, one must be cautious in generalizing its application in organizations. For example, both trust and leadership are complex and broad topics that cannot be studied and explained in a single study. One of the implications of this study posits that from the student-athletes' perspective understanding and separating the servant leadership component of organizational stewardship may be difficult to accomplish.

Holmes, McNeil, Adorna and Procaccino's (2008) study explored collegiate student-athletes' preferences and perceptions regarding peer leadership in two contexts (i.e. on and off the field). One of the findings revealed that men self-reported a preference for more autocratic behaviors in their peer leader in comparison to women. This study supported past research which have shown that men and women tend to self-report

differences pertaining to their coaches' leadership (Chelladurai, 1990; Beam, Serwatka & Wilson, 2004). An implication of these studies indicates that gender could be a factor in terms of student-athletes' perception of leadership and their eventual leadership development.

Chapter III

Methodology/Procedure

This study focused on learning about the leadership development of student-athletes. Intercollegiate athletes were the target sample. The researcher targeted student-athletes under a total of 34 NCAA Division I collegiate coaches at two large Midwestern Universities after receiving approval from the Institution Review Board. To obtain the student-athletes' sample, their coaches were targeted since they were the sole means of getting in contact with the student-athletes ethically. Coaches' email addresses were retrieved via their institution's athletic website. An email followed by a telephone call was conducted to ensure that they received the information regarding the study. The contents of the email included a clear description of the study's purpose, the risks and benefits associated with participating (the full text of the email is located in Appendix G). The Institutional Review Board Governing Research on human subjects at the University of Nebraska approved this study (the approval letter can be found in Appendix H). This process took place in July 24th to August 18th 2009 during the student-athletes' preseason training. The preseason is a busy time for coaches and student-athletes since this is the time of preparation for the upcoming fall season. Of the 34 coaches solicited, 21 replied. Fifteen coaches indicated their willingness to participate while the rest stated it was not a convenient time for their players to participate. The researcher followed up weekly over a four week period with an email and phone call reminding the participating coaches of the study.

Data Collection

The coaches who agreed to allow their student-athletes to participate in the study made arrangements with the researcher regarding contacting their athletes. The researcher intended to send the demographic and questionnaire forms to the student-athletes' email addresses. All but one coach agreed. The coach who objected agreed to have the demographic and questionnaire forms sent to their office so that they could administer the survey personally and mail it back to the researcher.

The researcher then mailed the self-rated Servant Leadership Questionnaire (SLQ) survey instrument along with a demographic sheet directly to the coach's office (See Appendixes A & G). Participants were provided with a return envelope already paid for, to return the completed questionnaire within a two-week period. The SLQ instrument was completed by the student-athletes. Each student-athlete rated his or her leadership behaviors and attitudes as he or she perceives them. The researcher performed a meticulous review of all the completed instruments to ensure that participants filled them out completely. There were instances where student-athletes filled out the first part of the survey form, but did not complete the individual scoring sheet (See Appendix A). The researcher then added the student-athletes' completed scores on the first part of the survey form and entered them into the second part of the survey form to determine their scores on each subscale. Additionally, data on the many community service activities that the student-athletes engage in were retrieved from the coordinators responsible for organizing the athletes' volunteer work at both institutions. The researcher was provided with information regarding the breakdown of the community service work conducted by the teams as well as the class standing. For instance, it is assumed that the freshmen

student-athletes who participated in this study would have completed approximately (26 hours per athlete) of community service work, sophomores (52 hours per athlete), juniors (78 hours per athlete) and seniors (104 hours per athlete).

Study Design

The primary purpose of this study explored the possible relationship between participating in community service through intercollegiate athletics and servant leadership. The secondary purpose of this study examined whether gender influences the relationship between intercollegiate athletes who participate in community service and servant leadership. This research is aimed at discovering relationships among the dependent variables: altruistic calling, emotional healing, persuasive, mapping, wisdom and organizational stewardship. The independent variables were freshmen = first year college/university students, sophomores = second year, juniors = third year and seniors = fourth year. A Survey research design was used with a covariate (gender). Survey research is used to measure variables by asking a sample of people from a population a set of questions and using the answers to describe the relationships among that population (Fowler, 2009). Also, this procedure allowed the researcher the opportunity to collect quantitative, numbered data using questionnaires in which a statistical analysis of the data can be conducted to describe trends about responses to the survey questions and to test the research hypotheses. The researcher can interpret the meaning of the data by relating results of the statistical test back to past research studies (Creswell, 2008).

H1a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Altruistic Calling at University A.

H1b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Altruistic Calling at University B.

H1c: There is no relationship between freshmen, sophomores, juniors and seniors who participated in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Altruistic Calling by University.

H2a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Emotional Healing at University A.

H2b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Emotional Healing at University B.

H2c: There is no relationship between freshmen, sophomores, juniors and seniors who participated in community service through intercollegiate athletics and the SLQ subscale: Emotional Healing by university.

H3a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Wisdom at University A.

H3b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Wisdom at University B.

H3c: There is no relationship between freshmen, sophomores, juniors and seniors who participated in community service through intercollegiate athletics and the SLQ subscale: Wisdom by university.

H4a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Persuasive Mapping at University A.

H4b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Persuasive Mapping at University B.

H4c: There is no relationship between freshmen, sophomores, juniors and seniors who participated in community service through intercollegiate athletics and the SLQ subscale: Persuasive Mapping by university.

H5a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Organizational Stewardship at University A.

H5b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Organizational Stewardship at University B.

H5c: There is no relationship between freshmen, sophomores, juniors and seniors who participated in community service through intercollegiate athletics and the SLQ subscale: Organizational Stewardship by university.

H6a: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales at University A.

H6b: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales at University B.

H6c: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales by university.

The independent variables are the four different years of participation in intercollegiate athletics which include: freshmen, sophomores, juniors and seniors. Second, the dependent variables include the servant leadership subscales: altruistic calling, emotional healing, persuasive mapping, wisdom and organizational stewardship. The covariate variable was an athlete's gender. This variable is considered to be

correlated with the dependent variable and possibly predictive of the outcome under study (Edwards, 1979).

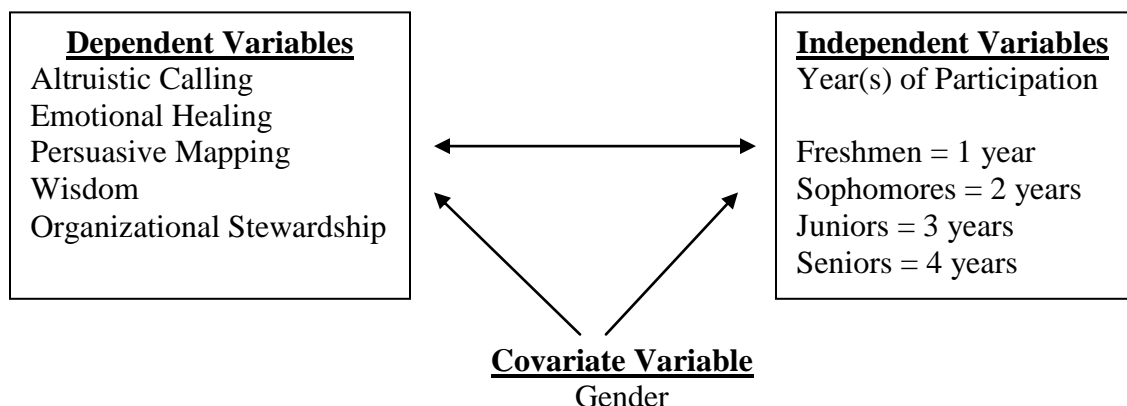


Figure 3. Conceptual Model.

Population

The population for this study consisted of 136 student-athletes from two large Midwestern Universities. The student-athletes are members of an intercollegiate sport team specifically, Women's Basketball, Men's and Women's Golf, Men's and Women's Cross Country, Men's and Women's Soccer, Men's and Women's Gymnastics, Volleyball and Women's Rifle. This population of sport teams was chosen because their coaches agreed to have the athletes participate as opposed to the other sport teams who declined. The ability to represent the examination of student-athletes leadership behaviors and attitudes as they perceive them with relationship to their participation at the college level and exposure to community service work was one of the main reasons why they were selected. Student-athletes were divided into college class year which were freshmen or first year college/university students, sophomores or second year college/university

students, juniors or third year college/university students, seniors or fourth year college/university students.

Sample

The sample population for this study targeted student-athletes that are members of an intercollegiate sport team. The researcher contacted 34 NCAA Division I collegiate coaches (men's and women's soccer, women's rifle, men's and women's gymnastics, men's and women's cross country, volleyball, men's and women's basketball) at two Universities in the same Midwestern state. Fifteen coaches indicated their willingness to have the athletes participate (University A 5 coaches and University B 10 coaches). One University (University A) has a student population of more than 7,000. The other University (University B) has a student population of more than 24,000. Both are located within 50 miles of a major metropolitan area. The researcher mailed a total of 150 surveys to the coaches (54 at University A and 96 at University B), who then distributed the surveys to their athletes. Therefore, the researcher did not have direct contact or contact information for the student-athletes. Of the 150 surveys that the coaches administered, 49 were returned from University A (response rate 91%) and 87 returned from University B (response rate 91%). The total response rate was 91% with a total of 136 were returned to the researcher from both samples.

In purposeful sampling, the researcher intentionally selects participants and locations to learn or understand the central phenomenon (Creswell, 2008). Student-athletes were selected because they have defining characteristics that the researcher wants to explore in depth. In this case the researcher explored the leadership development of the student-athlete population to better understand the benefits associated with intercollegiate

participation and their exposure to community service. Initially, the researcher's aim was to conduct a random sampling but because the participation rate was low he had to utilize all the returns.

Instrumentation

In addition to the general demographic information of age, gender and college year participation level the servant leadership questionnaire (SLQ) developed by Barbuto & Wheeler (2006) was utilized to measure servant leadership subscales. Barbuto and Wheeler's (2006) initial instrument measured eleven potential dimensions of servant leadership: calling, listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, growth and community building. To determine the psychometric properties of the questionnaire the authors administered it to 80 elected community leaders and 388 raters from professional organizations in their state. This process was used to test consistency, confirm factor structure and assess convergent, divergent and to predict the validity and reliability of the instrument (Barbuto & Wheeler, 2006). Exploratory factor analyses were then carried out which yielded five servant leadership factors from a total of 23 items. These were altruistic calling, emotional healing, persuasive mapping, wisdom and organizational stewardship. The reliability of the servant leadership questionnaire (SLQ) was determined by comparing leader and rater versions of the instrument. Each subscale was assessed using SPSS scale inter-rater reliability (alpha) function to test for internal reliability on total factor correlations. Results from the self version of each subscale indicated reliability which ranged from .82 to .92. Other opportunities to improve the reliability coefficient alphas for each of the

subscales were non-existent. This instrument was carefully selected due to its demonstrated reliability and validity in previous studies on leadership development.

Data Analysis

The researcher performed a Multivariate Analysis of Covariance (MANCOVA) test to statistically analyze the data. This test was specifically chosen for several reasons inherent in the design and purpose of the study. First, MANCOVA was used to compare groups formed by categorical independent variables on group differences in a set of interval dependent variables (Huberty & Morris, 1989). Second, because this study has a covariate in the form of gender this test was used to control variables for the independent factors, serving to reduce the error level. MANCOVA can be seen as a form of "what if" analysis, asking what would happen if all cases scored equally on the covariates, so that the effect of the factors over and beyond the covariates can be isolated (Garson, 2009; Huberty & Morris, 1989).

Because this study has implications for the leadership literature, the statistical level for significance was set a priori at .05 to ensure a 95% probability that the sample outcomes were true with regard to the null hypotheses (Gravetter & Wallnau, 2007). This procedure allowed the researcher to compare significant differences between the subscales of servant leadership and participation in intercollegiate athletics between the freshman, sophomore, junior and senior groups. Also, this procedure was used to help prevent the researcher from committing a type I error and thus reporting false results. Finally, this procedure was used to test the null hypotheses.

Ethical Considerations

The researcher in this study adhered to all possible ethical standards. All participants were provided with an informed consent letter via their coach's email addresses indicating that the study was not mandated and that they had the right to not participate, although there were no known risks associated with participating in the study. The surveys were adapted in a manner that participants did not have to include their names; rather, a simple indication of gender, sport, and year of college were the only information needed by the researcher.

Approval

The Institutional Review Board at the University of Nebraska-Lincoln approved this study in July 2009. This letter was also sent out to all coaches of the student-athletes who participated in this study via email (See Appendix H).

Chapter IV

Results

The results section is organized and presented by the hypotheses related to the research questions following a descriptive analysis of the sample population. In proceeding, first an explanation of the instrument used to measure the dependent variable will be discussed. Second, a summary of the sample population and statistical test used to measure outcomes in the independent, dependent and covariate variables will be discussed. Third, a presentation of descriptive statistical analyses for each of the hypotheses will be discussed. The fourth area of this section will report on the differences between student-athletes at both Universities.

Surveys were mailed to 150 student-athletes. One Hundred and thirty-six surveys (136) were returned for a response rate of 91%. Demographically, the respondents were 45% male (n=61) and 55% female (n=75) with ages ranging from 18 to 24 years and a mean age of 19.5 (See table 1a). Table 1A provides a combined gender statistics for participants in the study. Table 1B gives a breakdown of the gender statistics for participants by university.

Table 1A

Frequency Distribution of Participants by Gender

Gender	Frequency (N=136)	Percentage
Male	61	45%
Female	75	55%

Table 1B

Frequency Distribution of Participants by University, Gender and College Standing of Participation in Intercollegiate Athletics

University	A		B	
	Males	Females	Males	Females
Freshmen	n = 5	n = 8	n = 14	n = 16
Sophomores	n = 2	n = 6	n = 9	n = 12
Juniors	n = 6	n = 8	n = 13	n = 8
Seniors	n = 5	n = 9	n = 7	n = 8
Frequency	(N = 18)	(N = 31)	(N = 43)	(N = 44)

Table 2 gives a breakdown of the of academic class standing of student-athletes who participated in this study. Thirty-two percent of the participants were freshmen, 21% sophomores, 26% juniors and 21% seniors. Further statistics of the academic class standing of student-athletes who participated in this study by university can be found in Table 3.

Table 2

Frequency Distribution of Participants by College Standing of Participation in Intercollegiate Athletics

Academic Standing of Participation in Intercollegiate Athletics			
			Percentage
Freshmen	n = 43		32%
Sophomores	n = 29		21%
Juniors	n = 35		26%
Seniors	n = 29		21%
Frequency	(N = 136)		

Table 3

Frequency Distribution of Participants by Universities and College Standing of Participation in Intercollegiate Athletics

Academic Standing of Participation in Intercollegiate Athletics Frequency				
University	A	Percentage	B	Percentage
Freshmen	n = 13	27%	n = 30	34%
Sophomores	n = 8	16%	n = 21	24%
Juniors	n = 13	27%	n = 21	24%
Seniors	n = 15	30%	n = 15	16%
Frequency	(N = 49)		(N = 87)	

The statistical test used to measure outcomes in the independent, dependent and covariate variables was the Multivariate Analysis of Covariance (MANCOVA). The Wilks' Lambda test is the method used for reporting under the MANCOVA test when there are more than two dependent variables and also, some of the independent variables are treated as covariates. First, it states the results of the overall test of inter-group differences by university followed by a breakdown of the significance levels and partial eta-squared for each dependent variable. Also, the overall test of inter-group differences followed by a breakdown of the significance levels and partial eta-squared for each dependent variable will be reported to compare student-athletes self-reported scores at both universities.

Table 4A shows the test of overall differences among student-athletes at University A which did not yield a statistically significant relationship ($p=.601$; partial eta-squared = .097).

Table 4A

MANOVA Results of the Overall Test of Inter-Group Differences among Student-Athletes at University A and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Overall(s)	.736	15	110.824	.868	.601

$p > .05$

Table 4B shows the test of overall differences among student-athletes at University B which did not yield a statistically significant relationship ($p=.139$; partial eta-squared = .083).

Table 4B

MANOVA Results of the Overall Test of Inter-Group Differences among Student-Athletes at University B and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Overall(s)	.771	15	215.725	1.420	.139

$p > .05$

Table 4C shows the test of overall differences among the two groups of student-athletes when compared which was statistically significant ($p=.009$; partial eta-squared = .122).

Table 4C

MANOVA Results of the Overall Test of Inter-Group Differences among Student-Athletes by University and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Overall(s)	.878	5	116.000	3.215	.009*

$p < .05$ *significant

Table 5A shows the Univariate between-subjects results of the non-statistically significant relationship between the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics and the SLQ subscales at University A ($p=.601$; partial eta-squared = .097).

Table 5A
MANOVA Univariate Between-Subjects Results of Student-Athletes at University
A and the Servant Leadership Behaviors using Wilks' Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	3	2.076	.363	.780
Emotional Healing	3	6.164	.605	.615
Wisdom	3	4.630	.571	.637
Persuasive Mapping	3	16.770	1.880	.147
Organizational Stewardship	3	13.569	1.319	.280

$p > .05$

Additionally, Table 5B shows the Univariate between-subjects results of the statistically significant relationship between the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics and the SLQ subscales altruistic calling at University B ($p=.015$; partial eta-squared = .120).

Table 5B
MANOVA Univariate Between-Subjects Results of Student-Athletes at University
B and the Servant Leadership Behaviors using Wilks' Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	3	18.305	3.721	.015*
Emotional Healing	3	7.155	.954	.419
Wisdom	3	10.175	1.435	.239
Persuasive Mapping	3	18.282	1.566	.204
Organizational Stewardship	3	11.105	1.176	.324

$p < .05$ *significant

Table 5C shows the Univariate between-subjects results of the statistically significant relationships between the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics and the SLQ subscales among the two groups of student-athletes when compared. Significant relationships were found between class standing and the SLQ subscales altruistic calling ($p=.001$; partial eta-squared = .084), persuasive mapping ($p=.036$; partial eta-squared = .036) and organizational stewardship ($p=.008$; partial eta-squared = .058).

Table 5C

MANOVA Univariate Between-Subjects Results of Student-Athletes by University and the Servant Leadership Behaviors using Wilks' Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	1	56.884	11.018	.001*
Emotional Healing	1	11.045	1.299	.257
Wisdom	1	4.866	.659	.419
Persuasive Mapping	1	50.003	4.518	.036*
Organizational Stewardship	1	71.661	7.329	.008*

$p < .05$ *significant

In the Multivariate Analysis of Covariance (MANCOVA) test, Box M tests MANCOVA's assumption of homoscedasticity using the F distribution (Garson, 2009). If $p(M) < .05$, then the covariances are significantly different. For University A student-athletes, $p(M)$ was $> .05$ with a significance level at .429 (See table 6A).

Table 6A

Box Test of Equality of Covariance Matrices

Box's M	Mean	df1	df2	F	Sig.
	59.552	45	3086.200	1.023	.429

$p > .05$

For University B student-athletes, $p(M)$ was $>.05$ with a significance level at .665 (See table 6B).

Table 6B

Box Test of Equality of Covariance Matrices

Box's M	Mean	df1	df2	F	Sig.
	45.892	45	11351.858	.899	.665

$p > .05$

When student-athletes at both universities were compared, $p(M)$ was $>.05$ with a significance level at .279 (See table 6B).

Table 6C

Box Test of Equality of Covariance Matrices

Box's M	Mean	df1	df2	F	Sig.
	266.420	180	5595.643	1.060	.279

$p > .05$

Findings Related to the Research Questions

The research question in this study focused on the relationship between academic class standing of students who participate in intercollegiate athletics and the servant leadership questionnaire subscales. A secondary interest was to examine if a relationship exists between the gender of students who participate in intercollegiate athletics and the SLQ subscales.

Question 1: Is there a relationship between servant leadership behaviors and college student-athletes number of years of participation in community service at the college level?

The above question was tested with the following null hypothesis.

H1a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Altruistic Calling at University A.

Results for Null Hypothesis 1a

The researcher accepted null hypothesis 1a since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University A had no statistically significant relationship with the SLQ subscale altruistic calling $F(3, 45) = .363$; ($p = .780$; partial eta-squared = .024).

H1b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Altruistic Calling at University B.

Results for Null Hypothesis 1b

The researcher rejected null hypothesis 1b since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University B had a statistically significant relationship with the SLQ subscale altruistic calling $F(3, 83) = 3.74$; ($p = .015$; partial eta-squared = .120).

H1c: There is no relationship between academic class standing of students who participate in community service through intercollegiate athletics and the SLQ subscale of altruistic calling by university.

Results for Null Hypothesis 1c

The researcher rejected null hypothesis 1c since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics had a significant and weak relationship with the SLQ subscale altruistic calling ($p=.001$; partial eta-squared = .084); University A ($M = 9.98$, $SD = 2.496$) and University B ($M = 11.08$, $SD = 2.319$).

H2a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Emotional Healing at University A.

Results for Null Hypothesis 2a

The researcher accepted null hypothesis 2a since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University A had no statistically significant relationship with the SLQ subscale emotional healing $F(3, 45) = .605$; ($p=.615$; partial eta-squared = .040).

H2b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Emotional Healing at University B.

Results for Null Hypothesis 2b

The researcher accepted null hypothesis 2b since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University B had no statistically significant relationship with the SLQ subscale emotional healing $F(3, 83) = 954$; ($p = .419$; partial eta-squared = .034).

Results for Null Hypothesis 2c

H2c: There is no relationship between academic class standing of students who participate in community service through intercollegiate athletics and the SLQ subscale of emotional healing by university.

The researcher accepted null hypothesis 2c since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics was not significantly related with the SLQ subscale emotional healing ($p = .257$; partial eta-squared = .011); University A ($M = 10.49$, $SD = 3.267$) and University B ($M = 10.85$, $SD = 2.747$).

H3a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Wisdom at University A.

Results for Null Hypothesis 3a

The researcher accepted null hypothesis 3a since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University A had no statistically

significant relationship with the SLQ subscale wisdom $F(3, 45) = .571$; ($p = .637$; partial eta-squared = .037).

H3b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Wisdom at University B.

Results for Null Hypothesis 3b

The researcher accepted null hypothesis 3b since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University B had no statistically significant relationship with the SLQ subscale wisdom $F(3, 83) = 1.435$; ($p = .239$; partial eta-squared = .05).

Results for Null Hypothesis 3c

H3c: There is no relationship between academic class standing of students who participate in community service through intercollegiate athletics and the SLQ subscale of wisdom by university.

The researcher accepted null hypothesis 3c since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics was not significantly related with the SLQ subscale wisdom ($p = .419$; partial eta-squared = .005); University A ($M = 14.55$, $SD = 2.844$) and University B ($M = 15.11$, $SD = 2.669$).

H4a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Persuasive Mapping at University A.

Results for Null Hypothesis 4a

The researcher accepted null hypothesis 4a since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University A had no statistically significant relationship with the SLQ subscale persuasive mapping $F(3, 45) = 1.880$; ($p = .147$; partial eta-squared = .114).

H4b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Persuasive Mapping at University B.

Results for Null Hypothesis 4b

The researcher accepted null hypothesis 4b since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University B had no statistically significant relationship with the SLQ subscale persuasive mapping $F(3, 83) = 1.566$; ($p = .204$; partial eta-squared = .05).

Results for Null Hypothesis 4c

H4c: There is no relationship between academic class standing of students who participate in community service through intercollegiate athletics and the SLQ subscale of persuasive mapping by university.

The researcher rejected null hypothesis 4c since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics had a significant and weak

relationship with the SLQ subscale persuasive mapping ($p=.036$; partial eta-squared = .036); University A ($M = 12.28$, $SD = 3.040$) and University B ($M = 13.25$, $SD = 3.438$).

H5a: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Organizational Stewardship at University A.

Results for Null Hypothesis 5a

The researcher accepted null hypothesis 5a since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University A had no statistically significant relationship with the SLQ subscale organizational stewardship $F(3, 45) = 1.319$; ($p=.280$; partial eta-squared = .083).

H5b: There is no relationship between freshmen, sophomores, juniors and seniors who participate in community service through intercollegiate athletics and the servant leadership questionnaire subscale (SLQ): Organizational Stewardship at University B.

Results for Null Hypothesis 5b

The researcher accepted null hypothesis 5b since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics at University B had no statistically significant relationship with the SLQ subscale organizational stewardship $F(3, 83) = 1.176$; ($p=.324$; partial eta-squared = .04).

Results for Null Hypothesis 5c

H5c: There is no relationship between academic class standing of students who participate in community service through intercollegiate athletics and the SLQ subscale of organizational stewardship by university.

The researcher rejected null hypothesis 5c since the Univariate between-subjects test showed that the academic class standing (freshman, sophomore, junior and senior) of students who participate in intercollegiate athletics had a significant and weak relationship with the SLQ subscale organizational stewardship ($p=.008$; partial eta-squared = .058); University A ($M = 14.43$, $SD = 3.068$) and University B ($M = 13.31$, $SD = 3.274$).

Question 2: Is the relationship between college student-athletes' development of servant leadership behaviors and intercollegiate athletes' participation in community service moderated by gender?

The above question was tested with the following null hypothesis.

H6a: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales at University A.

Results for Null Hypothesis 6a

The researcher rejected null hypothesis 6a since the Univariate between-subjects test showed that gender participation in community service through intercollegiate athletics at University A had a significant and weak relationship with the SLQ subscale altruistic calling $F(3, 45) = 6.831$; ($p=.012$; partial eta-squared = .134. Community service through intercollegiate athletics at University A also had a significant and weak relationship with the SLQ subscale emotional healing $F(3, 45) = 4.417$ ($p=.041$; partial eta-squared = .091).

The results are presented in Table 9A. This finding is consistent with previous research which has indicated a gender difference on the subscale emotional healing (Stuhr, 2007).

H6b: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales at University B.

Results for Null Hypothesis 6b

The researcher accepted null hypothesis 6b since the overall MANCOVA using Wilks' Lambda results showed that gender participation in community service through intercollegiate athletics had no statistically significant relationship with the SLQ subscales at University B $F(5, 78) = .632$; ($p = .676$; partial eta-squared = .039).

Results for Null Hypothesis 6c

H6c: There is no relationship between gender participation in community service through intercollegiate athletics and the SLQ subscales by university.

The researcher rejected null hypothesis 6c since the Univariate between-subjects test showed that gender participation in community service through intercollegiate athletics had a significant and weak relationship with the SLQ subscales altruistic calling ($p = .009$; partial eta-squared = .056; University A ($M = 10.25$, $SD = 2.488$) and University B ($M = 11.04$, $SD = 2.345$) and Emotional healing ($p = .008$; partial eta-squared = .058; University A ($M = 10.10$, $SD = 3.037$) and University B ($M = 11.23$, $SD = 2.773$)). The results are presented in Table 9C. One of these findings is consistent with previous research which has indicated a gender difference on the subscale emotional healing (Stuhr, 2007).

Table 7A shows the MANCOVA overall statistically significant relationship result of gender participation in intercollegiate athletics and the servant leadership behaviors at university A ($p = .035$; partial eta-squared = .252).

Table 7A

MANCOVA Results of Gender Participation in Intercollegiate Athletics at University A and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Gender	.748	5	40	2.692	.035*

p < .05 *significant

Table 7B shows the MANCOVA overall no statistically significant relationship result of gender participation in intercollegiate athletics and the servant leadership behaviors at university B ($p=.676$; partial eta-squared = .039).

Table 7B

MANCOVA Results of Gender Participation in Intercollegiate Athletics at University B and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Gender	.961	5	78	.632	.676

p > .05

Table 7C shows the MANCOVA overall statistically significant relationship result of gender participation in intercollegiate athletics and the servant leadership behaviors by university ($p=.014$; partial eta-squared = .114).

Table 7C

MANCOVA Results of Gender Participation in Intercollegiate Athletics by University and the Servant Leadership Behaviors using Wilks' Lambda Test

Effect	Wilks' Lambda	df1	df2	F	Sig.
Gender	.909	15	320.626	750	.014*

p < .05 *significant

Table 8 gives a breakdown of the descriptive statistic results of student-athletes' participation in intercollegiate athletics by university, gender and the servant leadership behaviors.

Table 8

Descriptive statistic results of Student-Athletes' participation in Intercollegiate athletics by University and Gender and the Servant Leadership Behaviors

		University A		University B	
Variable		M	SD	M	SD
Overall Intercollegiate Participation					
1.	Altruistic Calling	9.98	2.496	11.08	2.319
2.	Emotional Healing	10.49	3.267	10.85	2.747
3.	Wisdom	14.55	2.844	15.11	2.669
4.	Persuasive Mapping	12.28	3.040	13.25	3.438
5.	Organizational Stewardship	13.31	3.274	14.43	3.068
N		49		87	
Gender Participation					
1.	Altruistic Calling	10.25	2.488	11.04	2.345
2.	Emotional Healing	10.10	3.037	11.23	2.773
3.	Wisdom	15.25	2.767	14.64	2.700
4.	Persuasive Mapping	12.75	3.004	13.02	3.576
5.	Organizational Stewardship	13.74	3.449	14.25	2.941
N		61		75	

Note. University A = student-athletes self-reported servant leadership behaviors; University B = student-athletes self-reported servant leadership behaviors.

Table 9A shows the Univariate between-subjects results of statistically significant relationships of gender participation in community service through intercollegiate athletics and the SLQ subscales altruistic calling ($p=.012$; partial eta-squared = .134) and emotional healing ($p=.041$; partial eta-squared = .091).

Table 9A

MANCOVA Between-Subjects Results of Gender Participation in Intercollegiate Athletics at University A and the Servant Leadership Behaviors using Wilks' Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	1	39.069	6.831	.012*
Emotional Healing	1	44.978	4.417	.041*
Wisdom	1	18.605	2.294	.137
Persuasive Mapping	1	1.100	.123	.727
Organizational Stewardship	1	20.661	2.009	.163

$p < .05$ *significant

Table 9B shows the Univariate between-subjects results of no statistically significant relationship of gender participation in community service through intercollegiate athletics and the SLQ subscales at University B.

Table 9B

MANCOVA Between-Subjects Results of Gender Participation in Intercollegiate Athletics at University B and the Servant Leadership Behaviors using Wilks'

Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	1	5.051	1.027	.314
Emotional Healing	1	15.931	2.124	.149
Wisdom	1	.069	.010	.922
Persuasive Mapping	1	4.545	.389	.534
Organizational Stewardship	1	1.138	.121	.729

$p > .05$

Table 9C shows the Univariate between-subjects results of statistical significant relationships of gender participation in community service through intercollegiate athletics and the SLQ subscales altruistic calling ($p=.009$; partial eta-squared = .056) and emotional healing ($p=.008$; partial eta-squared = .058).

Table 9C

MANCOVA Between-Subjects Results of Gender Participation in Intercollegiate Athletics by University and the Servant Leadership Behaviors using Wilks'

Lambda Test

Source: Dependent Variable	df	Mean Square	F	Sig.
Gender: Altruistic Calling	1	36.804	7.129	.009*
Emotional Healing	1	62.388	7.337	.008*
Wisdom	1	8.259	1.119	.292
Persuasive Mapping	1	8.014	.724	.396
Organizational Stewardship	1	28.488	2.914	.09

$p < .05$ *significant

First, the results overall yielded no statistically significant relationship between student-athletes at both universities participating in intercollegiate athletics and servant leadership questionnaire subscales University A ($p=.601$; partial eta-squared = .097) and University B ($p=.139$; partial eta-squared = .083). However, Univariate between-subjects results yielded a statistical significant relationship on altruistic calling at University B ($p=.015$; partial eta-squared = .120).

Additionally, the MANCOVA using Wilks' Lambda test indicated an overall statistically significant relationship ($p=.035$; partial eta-squared = .252). Univariate between-subjects results yielded two statistically significant relationships between gender participation in intercollegiate athletics at University A and the servant leadership questionnaire subscales altruistic calling ($p=.012$; partial eta-squared = .134) and emotional healing ($p=.041$; eta-squared = .091).

In contrast, when student-athletes at both universities were compared against each other the MANOVA and MANCOVA tests yielded some interesting findings. For instance, there were three statistically significant relationships found between student-athletes at both institutions participating in intercollegiate athletics and servant leadership questionnaire subscales. The MANOVA using Wilks' Lambda test indicated that student-athletes at University B ($M = 11.08$, $SD = 2.319$) scored statistically significantly higher than student-athletes at University A ($M = 9.98$, $SD = 2.496$) on altruistic calling (See Table 5C).

For the servant leadership subscale of emotional healing, the MANOVA using Wilks' Lambda test indicated no statistically significant finding (See Table 5C). Student-athletes at University A ($M = 10.49$, $SD = 3.267$) self-reported significantly lower scores than University B ($M = 10.85$, $SD = 2.747$) student-athletes on emotional healing.

For the servant leadership subscale of wisdom, the MANOVA using Wilks' Lambda test indicated no statistically significant differences (See Table 5C). Student-athletes at University A ($M = 14.55$, $SD = 2.844$) self-reported significantly lower scores than University B ($M = 15.11$, $SD = 2.669$) student-athletes on wisdom.

For the servant leadership subscale of persuasive mapping, the MANOVA using Wilks' Lambda test indicated a statistically significant finding (See Table 5C). Student-athletes at University B ($M = 13.25$, $SD = 3.438$) scored statistically significantly higher than student-athletes at University A ($M = 12.28$, $SD = 3.040$) on persuasive mapping.

The MANOVA using Wilks' Lambda test indicated that student-athletes at University B ($M = 13.31$, $SD = 3.274$) scored statistically significantly higher than student-athletes at University A ($M = 14.43$, $SD = 3.068$) on organizational stewardship (See Table 5C).

Second, there were two statistically significant relationships found between gender participation in intercollegiate athletics at both institutions and the servant leadership questionnaire subscales. The MANCOVA using Wilks' Lambda test indicated that female student-athletes at University B ($M = 11.04$, $SD = 2.345$) scored statistically significantly higher than female student-athletes at University A ($M = 10.25$, $SD = 2.488$) on altruistic calling (See Table 9C). Female student-athletes at University B ($M = 11.23$, $SD = 2.773$) also scored statistically significantly higher than female student-athletes at University A ($M = 10.10$, $SD = 3.037$) on emotional healing (See Table 9C). Table 8 shows the summary of group means.

Summary of Results

Based on the results of the MANOVA test, it is evident that there is no overall statistically significant relationship between student-athletes participating in intercollegiate athletics and the servant leadership questionnaire subscales at University A ($p=.601$; partial eta-squared = .097) or University B ($p=.139$; partial eta-squared = .083). Interestingly, this study's first statistically significant finding was found in the Univariate between-subjects results which yielded a statistical significant relationship on altruistic calling at University B ($p=.015$; partial eta-squared = .120). Another finding of this study indicated two statistically significant relationships between gender participation in intercollegiate athletics at University A and the servant leadership questionnaire subscales altruistic calling ($p=.012$; partial eta-squared = .134) and emotional healing ($p=.041$; eta-squared = .091).

It was very interesting to find overall statistically significant relationships between academic class standing of intercollegiate athletes who participate in community service

and the SLQ subscales when student-athletes at both universities were compared against each other. For instance, overall the SLQ subscales showed the level of significance at ($p=.009$; partial eta-squared = .122) using Wilks' Lambda Test for both institutions. The first finding revealed that student-athletes at University B ($M = 11.08$, $SD = 2.319$) scored statistically significantly higher than student-athletes at University A ($M = 9.98$, $SD = 2.496$) on altruistic calling (See Table 8). The second finding revealed that student-athletes at University B ($M = 13.25$, $SD = 3.438$) scored statistically significantly higher than student-athletes at University A ($M = 12.28$, $SD = 3.040$) on persuasive mapping (See Table 8). The third finding revealed that student-athletes at University B ($M = 13.31$, $SD = 3.274$) scored statistically significantly higher than student-athletes at University A ($M = 14.43$, $SD = 3.068$) on organizational stewardship (See Table 8).

Additionally, the results of the MANCOVA test yielded statistically significant relationships between gender participation in intercollegiate athletics and the SLQ subscales ($p=.014$; partial eta-squared = .114). The first finding revealed that female student-athletes at University B ($M = 11.04$, $SD = 2.345$) scored statistically significantly higher than female student-athletes at University A ($M = 10.25$, $SD = 2.488$) on altruistic calling. The second and final finding revealed that female student-athletes at University B ($M = 11.23$, $SD = 2.773$) scored statistically significantly higher than female student-athletes at University A ($M = 10.10$, $SD = 3.037$) on emotional healing (See Table 8).

The Box's test of equality of covariance matrices showed the level of significance at .279, $p > .05$ (See Table 6C). Hence, it can be interpreted that the distributions of the dependent variables are approximately equal for the groups created by the independent grouping variable.

Chapter V

Summary, Conclusions, Discussion and Recommendations

Summary

The purpose of this study was to examine whether there was a relationship between student-athletes who participated in intercollegiate athletics at two large Midwestern universities with the subscales of servant leadership. A second purpose of this study was to examine the presence of a gender difference in participation in intercollegiate athletics with the subscales of servant leadership. The study explored the difference between freshmen, sophomores, juniors and seniors with respect to their participation in intercollegiate athletics and their development of antecedent behaviors of servant leadership.

Conclusions

Based on the research findings of the MANOVA test, overall the SLQ subscales showed the level of significance at ($p=.601$; partial eta-squared = .097) for University A and ($p=.139$; partial eta-squared = .083) for University B using Wilks' Lambda Test. However, Univariate between-subjects yielded a statistically significant relationship on altruistic calling at University B ($p=.015$; partial eta-squared = .120). Furthermore, overall results indicated a statistically significant relationship between gender participation in intercollegiate athletics and the SLQ subscales using a MANCOVA and Wilks' Lambda test ($p=.035$; partial eta-squared = .252). Univariate between-subjects yielded statistically significant relationships between gender participation in intercollegiate athletics and altruistic calling ($p=.012$; partial eta-squared = .134) and emotional healing ($p=.041$; eta-squared = .091).

In contrast, based on the research findings of the MANOVA test, overall the SLQ subscales showed the level of significance at ($p=.009$; partial eta-squared = .122) using Wilks' Lambda Test when student-athletes at both universities were compared with each other. Univariate between-subjects yielded three statistically significant relationships between academic class standing of students' participation in intercollegiate athletics and the SLQ subscales. When the two universities were compared, statistically significant differences were found between academic class standing of students' participation in intercollegiate athletics and the SLQ subscales altruistic calling ($p=.001$; partial eta-squared = .084), persuasive mapping ($p=.036$; partial eta-squared = .036), and organizational stewardship ($p=.008$; partial eta-squared = .058). There was also an overall statistically significant relationship between gender participation in intercollegiate athletics and the SLQ subscales using a MANCOVA and Wilks' Lambda test ($p=.014$; partial eta-squared = .114). Univariate between-subjects yielded two statistically significant relationships on altruistic calling ($p=.009$; partial eta-squared = .056) and emotional healing ($p=.008$; partial eta-squared = .058). This finding on emotional healing is consistent with previous research which indicated a gender difference on the subscale emotional healing (Stuhr, 2007). In Stuhr's study, females self-reported themselves higher on emotional healing than males.

Moreover, because the overall results of the MANOVA and MANCOVA using Wilks' Lambda test indicated statistically significant differences; the findings cannot be generalized even though the sample size met the Box test of equality of covariance matrices. Variables such as academic major, socioeconomic status and race, all which could be related to the level of servant leadership development behaviors, were not

collected in this study. These could have been confounding variables if the groups differed on these dimensions. Additionally, because this was the first study of its kind more research is needed to validate its results especially given the result for gender differences.

Hypothesis 1a was accepted where as hypotheses 1b and 1c were rejected since there was a statistically significant relationship between academic class standing of students who participate in intercollegiate athletics and the SLQ subscale of altruistic calling, H1a ($p=.780$; partial eta-squared = .024); H1b ($p=.015$; partial eta-squared = .120) and H1c ($p=.001$; partial eta-squared = .084). The researcher expected to find a significant relationship between participating in intercollegiate athletics and the SLQ subscale altruistic calling. It is possible that this was attributed to the consistent exposure student-athletes at University A and University B get with regard to engaging in volunteered community service work. Research has shown that student-athletes have accepted the call to serve others in their communities via volunteer work which positively impacts the lives of members in the community as well as contribute to the athletes' overall leadership development (Dobosz & Beaty, 1999; Potuto & Hanlon, 2006). However, in this study participation in community service had little effect on servant leadership attributes.

Hypotheses 2a, 2b and 2c were accepted since there was no statistically significant relationship between academic class standing of students who participate in intercollegiate athletics and the SLQ subscale of emotional healing H2a ($p=.615$; partial eta-squared = .040); H2b ($p=.419$; partial eta-squared = .034); H2c ($p=.257$; partial eta-squared = .011).

Hypotheses 3a, 3b and 3c were accepted after the results showed no statistically significant relationship between academic class standing of students who participate in intercollegiate athletics and the SLQ subscale of wisdom H3a ($p=.637$; partial eta-squared = .037); H3b ($p=.239$; partial eta-squared = .05); H3c ($p=.419$; partial eta-squared = .005).

Hypotheses 4a and 4b were accepted where as 4c was rejected since the results indicated a statistically significant relationship between academic class standing of students who participate in intercollegiate athletics and the SLQ subscale of persuasive mapping, H4a ($p=.147$; partial eta-squared = .114); H4b ($p=.204$; partial eta-squared = .05); H4c ($p=.036$; partial eta-squared = .036). The result for hypothesis 4c was not expected given that student-athletes are not in total control of the day to day operations of their institutions. Rather they are instructed and encouraged in some instances to participate in community service work. Barbuto and Wheeler (2006) defined persuasive mapping as “fostering an environment that uses mental models and encourages lateral thinking” (p. 307). In addition, past research has shown that the ability to develop mental models requires support and in some instances educational institutions have failed to help students develop this skill (Connelly et al, 2000; Ricketts & Rudd; 2002; Murray, 2006).

Hypotheses 5a and 5b were accepted where as 5c was rejected after the results showed there was a statistically significant relationship between academic class standing of students who participate in intercollegiate athletics and the SLQ subscale of organizational stewardship, H5a ($p=.280$; partial eta-squared = .083), H5b ($p=.324$; partial eta-squared = .04); H5c ($p=.008$; partial eta-squared = .058). Barbuto and Wheeler (2006) defined organizational stewardship as the belief that organizations have a legacy

to uphold and must purposely contribute to society (p. 308). The result for hypothesis 5c was interesting but not expected. It is possible that even though student-athletes are exposed to organized volunteer community service work as a collective unit, individually understanding and believing that he or she has to make a positive contribution to society may not resonate with each athlete. It may be challenging for them to understand and separate the servant leadership component of organizational stewardship (Reinke, 2004; Hernandez, 2007).

Hypothesis 6b was accepted where as 6a and 6c were rejected given that the overall results yielded two statistically significant relationships between gender participation in intercollegiate athletics on servant leadership behaviors, H6a was significant on altruistic calling ($p=.012$; partial eta-squared = .134) and on emotional healing ($p=.041$; partial eta-squared = .091) H6b was not significant ($p=.676$; partial eta-squared = .039). H6c was significant on altruistic calling ($p=.009$; partial eta-squared = .056) and on emotional healing ($p=.008$; partial eta-squared = .058). This finding on emotional healing is consistent with previous research which has indicated a gender difference on the subscale emotional healing (Stuhr, 2007). In addition, this finding supports the gender differences pertaining to self-reported leadership preferences between male and female student-athletes (Chelladurai, 1990; Beam, Serwatka & Wilson, 2004; Holmes, McNeil, Adorna & Procaccino, 2008). As stated earlier in this section, the researcher expected to find a significant relationship between participation in intercollegiate athletes and the SLQ subscales, altruistic calling, emotional healing and finally gender, because University A and University B place a strong emphasis on serving and giving back to their community; the researcher predicted that by exposing student-athletes to servant leadership behaviors

would have led to a higher self-report on altruistic calling and emotional healing. The reason for predicting a significant finding on gender was strongly influenced by a previous study which indicated a significant difference between males and females on this subscale (Stuhr, 2007).

Discussion Based on Comparisons between Universities A and B

It was surprising that differences between self-reported servant leadership behaviors were revealed among the student-athletes from both universities when they engaged in similar organized community volunteer work. In the following sections four speculations are stated which could have contributed to the differences.

The first speculation that may have contributed to the discrepancies between the two universities on the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship could be rooted in the philosophies of each institution. For instance, it is worth noting that university A was a public institution while university B was a private Jesuit-Catholic institution. It is critical that one pays attention to the mission statements of both institutions since this could explain in part how and what students actually learn during their college experience at these specific institutions. According to Anonymous, (2010) core elements of University A's mission statement states that:

“Its role as the primary intellectual and cultural resource for the State is fulfilled through the three missions of the University: teaching, research, and service. To capitalize on the breadth of programs and the multidisciplinary resources available at University A, a number of Centers exist to marshal faculty from a variety of disciplines to focus teaching and

research on specific societal issues and to provide technical assistance for business and industry in order to enhance their ability to compete in world markets. Additionally, interdisciplinary programs promote integration of new perspectives and insights into the instructional research and service activities. University A promotes respect for and understanding of cultural diversity in all aspects of society. It strives for a culturally diverse student body, faculty and staff reflecting the multicultural nature of the local community and the nation. The faculty is responsible for the curricular content of the various programs, and pursues new knowledge and truths within a structure that assures academic freedom in its intellectual endeavors. The curricula are designed to foster critical thinking, the re-examination of accepted truths, a respect for different perspectives including an appreciation of the multiethnic character of the nation, and a curiosity that leads to life-long learning. Additionally, an environment exists whereby students can develop aesthetic values and human relationships including tolerance for differing viewpoints” (Website of University A).

In comparison, according to Anonymous (2010) core elements of University B’s mission statement states that as a:

“Jesuit university, rooted in the Catholic tradition. At University B members live this mission and are guided by their identity. Because it is Catholic, members approach education with a passion for learning and a zeal for making a difference in the world. In the Catholic intellectual

tradition, members celebrate diversity, learn through dialogue, and pursue the truth in all its forms. As a Jesuit university the goal is to continually bring the richness of a 450 year old educational tradition to bear on the most contemporary issues of the world. The Jesuit vision commits its members' to form women and men of competence, conscience and compassion who have learned from reflecting upon their experiences of being for and with others. Members do this in service of a faith that does justice" (Website of University B).

With the mission statements of both institutions who participated in this study in mind, let us consider what research has found regarding public versus private universities which may explain the difference between student-athletes self-reported discrepancies on the servant leadership questionnaire subscales. According to research conducted on the differences in philosophy of public and private institution, one major difference is funding (Liebert, 1977; Winchip, 2004; Ali, Bhattacharyya & Olejniczak, 2010). For example, these studies indicated that public organizations receive funding from its local state bodies whereas private organizations typically have to rely on funding from sources such as alumni, local businesses and private donors. It is therefore the researcher's speculation that the level of volunteering that goes on in private educational institutions could be more significant than that conducted at public institutions. As a result, private institutions could be inclined to engage in more volunteer community work in part, because it is rooted in its mission statement, but more importantly because its survival depends on the many financial contributions from members in the community. It is important to note that the researcher of this study is not questioning or limiting the merits

of the level of volunteer community work that private institutions engage in. Also important to note is that the researcher did not study this area in the research.

Moreover, students at a private institution could be expected to engage in more volunteering work since it is embedded in the overall educational experience. Thus, students at these institutions might accept the need to serve others more frequently than students at public institutions when opportunities arise. Again the researcher of this study is not claiming that public students do not serve their communities wholeheartedly like private students do. Rather based on the findings of this study which indicated that student-athletes at the private institution scored themselves higher on the servant leadership behaviors altruistic calling, persuasive mapping and organizational stewardship in comparison to public student-athletes, influenced the researcher to propose mere speculations for the discrepancies.

Another speculation that may have contributed to the discrepancies between the two universities on the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship could be linked to the level of volunteering. For instance, based on data retrieved from the coordinators for student-athletes volunteer community work conducted throughout the year, University B student-athletes engaged in more frequent volunteering work than University A. It is vital to understand that the researcher of this study is not suggesting that university B does not place a strong emphasis on exposing its student-athletes to frequent community volunteer work. Rather, the data retrieved leads the researcher to speculate that the frequency of the community volunteer work could have been a factor in terms of University A student-athletes scoring themselves lower on the two servant leadership subscales.

The third speculation that may have contributed to the discrepancies between the two universities on the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship could be linked to coaching philosophies. Past research has proven that males and females prefer and react differently to their coaches' leadership behaviors either positively or negatively. (Chelladurai, 1990; Beam, Serwatka & Wilson, 2004; Holmes, McNeil, Adorna & Procaccino, 2008). This result could provide general support for the speculation that in the case of the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship; University B coaches based on their leadership philosophies may strongly encourage their student-athletes to serve their communities willingly and to take pride and ownership in representing their educational institution more frequently than University A coaches. The influence of the coaches in both universities could be related to each team's community volunteering objectives and the performance standards established to achieve those set standards.

The fourth speculation that may have contributed to the discrepancies between the two universities on the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship could be associated to each student-athlete's volunteering experience. According to past research, exposing children at a young age to boys' and girls' club, church groups and volunteering exercises tends to aid their overall development (Anderson-Butcher, Newsome, & Ferrari, 2003). Therefore, one explanation for the difference in self-reported scores on the servant leadership behaviors altruistic calling, persuasive mapping and organizational stewardship could be linked to prior association of volunteering for their boys' and girls' club or church groups. This past experience along with their present experience of participating in frequent

volunteering exercises at their current university may have contributed to their understanding of the servant leadership subscales altruistic calling, persuasive mapping and organizational stewardship; however this was not an area that the researcher studied.

This study reinforces the importance for further research to be conducted using this relatively new theory in comparison to others in the intercollegiate sporting field. The literature review indicated a gap in this area. To the contrary, articles were available regarding transformational and charismatic leadership and their usefulness in examining topics ranging from coaches job satisfaction to successful organizational leaders (e.g. Yusof 1998; Shamir & Howell, 1999). Such findings provide the opportunity for researchers and scholars to accept the call to conduct further research on this subject area.

Recommendation from this study

Because this study was the first of its kind to examine the effects of participating in intercollegiate athletics on servant leadership behaviors, the findings provide opportunities for scholars and practitioners to conduct further tests. Student-athletes should be given training about the servant leadership philosophy to better understand the characteristics that they already possess and to develop the ones that they lack. In the present body of research, there are limited studies on student-athletes leadership development. A great majority of the student-athletes had no prior knowledge of this leadership theory. If student-athletes are trained regarding the servant leadership philosophy and its components, it is likely that their self-reported scores would be different in the future. Also important is that student-athletes would be able to better understand how their volunteering experiences could contribute to leadership development behaviors.

Strengths of Findings

This study revealed overall statistically significant findings for the tested hypotheses. Gender was used as a moderator variable to help control the findings of this study (Baron & Kenny, 1986). This finding suggests that future research can be critical in learning and understanding the factors that may have contributed to the differences. Another strength of this study's findings was the follow-up analyses which indicated that student-athletes from University A and B self-reported differences on four of the five servant leadership subscales.

Limitations of Findings

The sample size of this study was relatively small and represented only a fraction of the student-athlete population at two large Midwestern Universities. Additionally, University A was a public institution whereas University B was a private institution which is another limitation of the study. Also, student-athletes ethnicity information was not gathered which could have provided useful information regarding differences in self-reported servant leadership behaviors. This study used a convenience sample of some student-athletes. Future research should address these limitations to help strengthen the present study's findings.

Future Research Opportunities

This study indicated that gender moderated the relationship between participating in intercollegiate athletics and the servant leadership subscales altruistic calling and emotional healing for the tested hypotheses. Future research could explore why the differences occurred when both universities engaged in similar volunteer community exercises. Below are several options that should be considered for future research aiming

to discover student-athletes development of servant leadership behaviors as a result of their institutions exposing them to volunteer community service work.

The first option is to conduct this study at other institutions to examine whether the study's results are consistent from location to location. If future research confirms that there is indeed a gender difference on the servant leadership subscale emotional healing, then it provides the opportunity to examine antecedent behaviors such as motivation or previous leadership experience. For example, Wernsing (2010) identified three levels of development (i.e. leadership competencies, identity and self-regulation, and adult development). Hence, future research should assess student-athletes' leadership skills, knowledge and abilities to determine their competencies for developing servant leadership behaviors. The challenge for scholars and researchers would be to develop a model to measure and test student-athletes antecedent leadership behaviors, to ensure that an accurate assessment is done regarding their self-reported servant leadership behaviors.

The second option is to broaden this study to include coaches to examine if a coach's coaching philosophy has an influence on student-athletes servant leadership development. For example, past research has indicated that males and females prefer and react differently to their coaches' leadership behaviors either positively or negatively. (Chelladurai, 1990; Beam, Serwatka, & Wilson, 2004; Holmes, McNeil, Adorna & Procaccino, 2008). If this is the case, then coaches' leadership behaviors could serve as a moderating variable and this may influence the self-reported servant leadership behaviors of student-athletes.

The third option is to conduct this study at a single institution with a large sample size to examine if an institution's philosophy and mission may influence how student-athletes

learn and engage in events and activities on and off their sporting fields, thus impacting their servant leadership development. Research has shown that differences in philosophies exist between most public and private institutions (Liebert, 1977; Winchip, 2004; Ali, Bhattacharyya, & Olejniczak, 2010). Hence, the results of the follow-up analysis of this study provide general support for future research to examine student-athletes servant leadership behaviors since both universities engaged in similar volunteer community exercises but self-reported differences on altruistic calling and organizational stewardship.

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Appendix A
Demographic Sheet

Age_____

Sex: Male_____ Female_____

1. What is the sport you are currently a participant in? _____

2. Please indicate your college year status.

____ Freshman

____ Sophomore

____ Junior

____ Senior

Please proceed to answering the SLQ questionnaire questions on the following page.

Thank you!

Appendix B

Student-Athletes Participation in Community Service Work

Student-Athlete Involvement- this annual event provides student-athletes an opportunity to learn about ways that they can make a difference in their community by interacting with various charitable organizations from the local community and University campus (Erwin, 2009).

Education Week- National American Education Week is a week-long campaign focused on the importance of education and a practice-makes-perfect motto (Erwin, 2009).

State Farm MVC Just Read Program- student-athletes volunteer their time to conduct speeches and reading lessons to local elementary schools on the importance of staying in school and obtaining an education (Operation Bluejay, 2009).

Kellom Elementary Project- student-athletes participate by volunteering their time to help with cleaning and refurbishing the school (Operation Bluejay, 2009).

Women's Build Habitat for Humanity- Female student-athletes coordinate and participate in building homes for individuals in need (Operation Bluejay, 2009).

Tennis Buddies-the Men's and Women's Tennis team participated with the local Special Olympic Athletes in teaching them the basic fundamentals involved in learning and playing the sport (Operation Bluejay, 2009).

Teammates- student-athletes are active participants in a mentoring program. This program matches athletes with local children that need mentoring on topics such as life skills, leadership, discipline, education and their overall well-being (Operation Bluejay, 2009).

Friends of Jaclyn - the Women's Basketball team volunteers and adopts a local child with brain cancer to become a support network (Operation Bluejay, 2009).

Appendix C

Box's Test of Equality of Covariance Matrices

Box's M	266.420
F	1.060
df1	180
df2	5595.643
Sig.	.279

$p < .05$

Appendix D

Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
AC	1.703	15	120	.059
EH	.600	15	120	.017
W	1.340	15	120	.134
PM	.676	15	120	.027
OS	.392	15	120	.294

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

Appendix E

Multivariate Tests^c

Effect		Value	F	Hypothesis df	Error df
Intercept	Pillai's Trace	.978	1040.381 ^a	5.000	116.000
	Wilks' Lambda	.022	1040.381 ^a	5.000	116.000
	Hotelling's Trace	44.844	1040.381 ^a	5.000	116.000
	Roy's Largest Root	44.844	1040.381 ^a	5.000	116.000
school	Pillai's Trace	.122	3.215 ^a	5.000	116.000
	Wilks' Lambda	.878	3.215 ^a	5.000	116.000
	Hotelling's Trace	.139	3.215 ^a	5.000	116.000
	Roy's Largest Root	.139	3.215 ^a	5.000	116.000
Gender	Pillai's Trace	.114	2.993 ^a	5.000	116.000
	Wilks' Lambda	.886	2.993 ^a	5.000	116.000
	Hotelling's Trace	.129	2.993 ^a	5.000	116.000
	Roy's Largest Root	.129	2.993 ^a	5.000	116.000
YearofParticipation	Pillai's Trace	.121	.993	15.000	354.000
	Wilks' Lambda	.881	1.007	15.000	320.626
	Hotelling's Trace	.133	1.020	15.000	344.000
	Roy's Largest Root	.116	2.748 ^b	5.000	118.000
school * Gender	Pillai's Trace	.043	1.032 ^a	5.000	116.000
	Wilks' Lambda	.957	1.032 ^a	5.000	116.000
	Hotelling's Trace	.044	1.032 ^a	5.000	116.000
	Roy's Largest Root	.044	1.032 ^a	5.000	116.000
school * YearofParticipation	Pillai's Trace	.102	.831	15.000	354.000
	Wilks' Lambda	.901	.824	15.000	320.626
	Hotelling's Trace	.107	.818	15.000	344.000
	Roy's Largest Root	.067	1.576 ^b	5.000	118.000
Gender * YearofParticipation	Pillai's Trace	.093	.751	15.000	354.000
	Wilks' Lambda	.909	.750	15.000	320.626
	Hotelling's Trace	.098	.749	15.000	344.000
	Roy's Largest Root	.075	1.761 ^b	5.000	118.000
school * Gender * YearofParticipation	Pillai's Trace	.105	.855	15.000	354.000
	Wilks' Lambda	.898	.849	15.000	320.626
	Hotelling's Trace	.110	.843	15.000	344.000
	Roy's Largest Root	.067	1.571 ^b	5.000	118.000

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

c. Design: Intercept + school + Gender + YearofParticipation + school * Gender + school * YearofParticipation + Gender * YearofParticipation + school * Gender * YearofParticipation

Multivariate Tests^c

Effect		Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.000	.978
	Wilks' Lambda	.000	.978
	Hotelling's Trace	.000	.978
	Roy's Largest Root	.000	.978
school	Pillai's Trace	.009	.122
	Wilks' Lambda	.009	.122
	Hotelling's Trace	.009	.122
	Roy's Largest Root	.009	.122
Gender	Pillai's Trace	.014	.114
	Wilks' Lambda	.014	.114
	Hotelling's Trace	.014	.114
	Roy's Largest Root	.014	.114
YearofParticipation	Pillai's Trace	.461	.040
	Wilks' Lambda	.447	.041
	Hotelling's Trace	.433	.043
	Roy's Largest Root	.022	.104
school * Gender	Pillai's Trace	.402	.043
	Wilks' Lambda	.402	.043
	Hotelling's Trace	.402	.043
	Roy's Largest Root	.402	.043
school * YearofParticipation	Pillai's Trace	.643	.034
	Wilks' Lambda	.650	.034
	Hotelling's Trace	.657	.034
	Roy's Largest Root	.172	.063
Gender * YearofParticipation	Pillai's Trace	.732	.031
	Wilks' Lambda	.733	.031
	Hotelling's Trace	.734	.032
	Roy's Largest Root	.126	.069

school * Gender *	Pillai's Trace	.616	.035
YearofParticipation	Wilks' Lambda	.622	.035
	Hotelling's Trace	.629	.035
	Roy's Largest Root	.173	.062

c. Design: Intercept + school + Gender + YearofParticipation + school * Gender +
 school * YearofParticipation + Gender * YearofParticipation + school * Gender *
 YearofParticipation

Appendix F

Survey Instrument

SLQ (Servant Leadership Questionnaire)
Leader Form

My Name: _____

This questionnaire is to describe your leadership behaviors and attitudes as you perceive them. Please answer all of the questions. Please indicate how well each of the following statements describes you.

Use the following rating scale:

Not at all Always	Once in a While	Sometimes	Fairly Often	Frequently, if not
0	1	2	3	4

- ____ 1. I put others' interests ahead of my own
- ____ 3. I am someone that others will turn to if they have a personal trauma
- ____ 5. I offer compelling reasons to get others to do things
- ____ 6. I encourage others to dream "big dreams" about the organization
- ____ 9. I have great awareness of what is going on
- ____ 10. I am very persuasive
- ____ 12. I am talented at helping others heal emotionally
- ____ 15. I believe that our organization needs to function as a community
- ____ 17. I can help others mend their hard feelings
- ____ 23. I am preparing the organization to make a positive difference in the future

SLQ Individual Scoring Sheet

Altruistic Calling: 1)____, 2)____, 16)____, 21)____ = ____
(Sum)

Emotional Healing: 3)____, 8)____, 12)____, 17)____ = ____
(Sum)

Wisdom: 4)____, 7)____, 9)____, 13)____ 22)____ = ____
(Sum)

Persuasive Mapping: 5)____, 6)____, 10)____, 14)____ 18)____ = ____
(Sum)

Organizational
Stewardship: 11)____, 15)____, 19)____, 20)____ 23)____ = ____
(Sum)

Appendix G

Study Participant Consent Letter



INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES
DEPARTMENT OF AGRICULTURAL LEADERSHIP
EDUCATION AND COMMUNICATION

June 23, 2009

Dear Coaches,

My name is Damien Westfield a doctoral and international student at University of Nebraska-Lincoln in the AGRICULTURAL, LEADERSHIP, EDUCATION AND COMMUNICATION department. I am a graduate and former soccer player at Creighton University and a member of its 2002 final four team.

The main reason for this email is to ask for your assistance as I work on completing my dissertation project which involves student athletes. My research is on the effects of participation in intercollegiate athletics on personal and professional development. Specifically, I will be examining whether there is a relationship between individuals who participate in intercollegiate athletics and what effect that participation may have on developing as a servant leader.

To help better understand your student athletes' servant leadership development, I would greatly appreciate if they could be participants. For this reason, I will need your team's current roster with contact information for each athlete to conduct a random sampling. Being a participant is simple and will take only twenty minutes to:

1. Fill out the short SLQ (Servant Leader Questionnaire).
2. Fill out a brief demographic sheet.
3. Put the two forms into a pre-paid return envelope and mail to researcher.

There is no right or wrong answers on these forms. The questions they answer will help us better understand if student athletes develop some servant leadership attributes as they

partake in intercollegiate sports. All return forms will be kept confidentially. I will be more than happy to share the results of my study with you.
Thank you for being part of unique leadership research at the University of Nebraska-Lincoln.

Regards,

Damien Westfield

Appendix H

Institutional Review Board Letter of Approval



June 23, 2009

Damien Westfield
Agricultural Leadership, Education and Communication

Leverne Barrett
Agricultural Leadership, Education and Communication
300 AGH UNL 68583-0709

IRB Number: 2009069925EP

Project ID: 9925

Project Title: The Effects of Participation in Intercollegiate Athletics on personal and professional Development

Dear Damien:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board's opinion that you have provided adequate safeguards for the rights and welfare of the participants in this study based on the information provided. Your proposal is in compliance with this institution's Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46).

Date of EP Review: 06/04/2009

You are authorized to implement this study as of the Date of Final Approval: 06/23/2009. This approval is Valid Until: 06/22/2010.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;

- Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff

For projects which continue beyond one year from the starting date, the IRB will request continuing review and update of the research project. Your study will be due for continuing review as indicated above. The investigator must also advise the Board when this study is finished or discontinued by completing the enclosed Protocol Final Report form and returning it to the Institutional Review Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,



Mario Scalora, Ph.D.
Chair for the IRB

